Laboratory Data Consultants, Inc. Data Validation Report

Project/Site Name: Ballfields Parcels at DoDHF Novato, CA

Collection Date: April 5 through April 6, 2005

LDC Report Date: June 16, 2005

Matrix: Soil

Parameters: Semivolatiles

Validation Level: NFESC Level III & IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2502505

Sample Identification

TO63-R3-SB04-0-0.5

TO63-R3-SB04-2-3**

TO63-R3-SB01-0-0.5

TO63-R3-SB01-4-5

TO63-R3-SB02-0-0.5

TO63-R3-SB03-0-0.5**

TO63-R4-SB03-0-0.5

TO63-R4-SB03-3-4

TO63-R4-SB02-0-0.5

TO63-R4-SB01-0-0.5**

TO63-SPN-SB03-4-5

TO63-SPN-SB01-0-0.5

TO63-SPN-SB01-0-0.5 Dup

TO63-SPN-SB01-3-4**

TO63-RSP-SB02-0-0.5

TO63-RSP-SB02-5-6**

TO63-RSP-SB03-0-0.5

TO63-RSP-SB03-5-6

TO63-R4-SB03-0-0.5MS

TO63-R4-SB03-0-0.5MSD

^{**}Indicates sample underwent NFESC Level IV review

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

The review follows the Final Sampling and Analysis Plan for Preliminary Assessment/Site Investigation of Ballfields Parcels at DoDHF Novato, California, (March 23, 2005) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent NFESC Level IV review. NFESC Level III review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.
- J Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.
- A Indicates the finding is based upon technical validation criteria.
- P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/2/05	4,6-Dinitro-2-methylphenol	23.6	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB01-0-0.5** TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MSD KWG0505825-5	J (all detects) UJ (all non-detects)	A
5/5/05	2,4-Dinitrophenol	26.8	TO63-R3-9B04-2-3**	J (all detects) UJ (all non-detects)	Α

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/3/05	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 2-Nitroaniline	24 26 30	TO63-R4-SB03-0-0.5 TO63-R4-SB03-0-0.5MS TO63-R4-SB03-0-0.5MSD KWG0505825-5	J (all detects) UJ (all non-detects)	А
5/4/05	Hexachlorocyclopentadiene 2,4-Dinitrophenol	22 27	TO63-R3-SB04-0-0.5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	А
5/10/05	N-Nitroso-di-n-propylamino	23	TO63-R3-SB01-0-0.5	J (all detects) UJ (all non-detects)	Α

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/2/05	3,3'-Dichlorobenzidine	29	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB03-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB03-3-4 TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
5/5/05	3,3'-Dichlorobenzidine	27	TO63-R3-SB04-2-3**	J (all detects) UJ (all non-detects)	А

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0505825-5 4/13/05		Di-n-butylphthalate	5.6 ug/L	All samples in SDG
		Bis(2-ethylhexyl)phthalate	8.6 ug/L	K2502505

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported	Modified Final
	TIC (RT in minutes)	Concentration	Concentration
TO63-R3-SB04-0-0.5	Di-n-butylphthalate	8.6 ug/Kg	10U ug/Kg
	Bis(2-ethylhexyl)phthalate	62 ug/Kg	200U ug/Kg
TO63-R3-SB04-2-3**	Bis(2-ethylhexyl)phthalate	20 ug/Kg	200U ug/Kg
TO63-R3-SB01-0-0.5	Di-n-butylphthalate	15 ug/Kg	15U ug/Kg
TO63-R3-SB01-4-5	Di-n-butylphthalate	9.1 ug/Kg	10U ug/Kg
	Bis(2-ethylhexyl)phthalate	51 ug/Kg	200U ug/Kg
TO63-R3-SB02-0-0.5	Di-n-butylphthalate	22 ug/Kg	22U ug/Kg
TO63-R3-SB03-0-0.5**	Di-n-butylphthalate	15 ug/Kg	15U ug/Kg
TO63-R4-SB03-0-0.5 (5x)	Di-n-butylphthalate	31 ug/Kg	50U ug/Kg
	Bis(2-ethylhexyl)phthalate	58 ug/Kg	1000U ug/Kg
TO63-R4-SB03-3-4	Di-n-butylphthalate	13 ug/Kg	13U ug/Kg
	Bis(2-ethylhexyl)phthalate	23 ug/Kg	200U ug/Kg

Sample	Compound	Reported	Modified Final
	TIC (RT in minutes)	Concentration	Concentration
TO63-R4-SB02-0-0.5	DI-n-butylphthalate	27 ug/Kg	27U ug/Kg
	Bis(2-ethylhexyl)phthalate	69 ug/Kg	200U ug/Kg
TO63-R4-SB01-0-0.5**	Di-n-butylphthalate	17 ug/Kg	17U ug/Kg
	Bis(2-ethylhexyl)phthalate	18 ug/Kg	200U ug/Kg
TO63-SPN-SB03-4-5	Di-n-butylphthalate	35 ug/Kg	35∪ ug/Kg
	Bis(2-ethylhexyl)phthalate	17 ug/Kg	200∪ ug/Kg
TO63-SPN-SB01-0-0.5 (5x)	Di-n-butylphthalate	24 ug/Kg	50U ug/Kg
	Bis(2-ethylhexyl)phthalate	26 ug/Kg	1000U ug/Kg
TO63-SPN-SB01-0-0.5 Dup (5x)	Bis(2-ethylhexyl)phthalate	27 ug/Kg	990U ug/Kg
TO63-SPN-SB01-3-4**	Di-n-butylphthalate	29 ug/Kg	29U ug/Kg
TO63-RSP-SB02-0-0.5	Di-n-butylphthalate	41 ug/Kg	41U ug/Kg
	Bis(2-ethylhexyl)phthalate	31 ug/Kg	200U ug/Kg
TO63-RSP-SB02-5-6**	Di-n-butylphthalate	36 ug/Kg	36U ug/Kg
	Bie(2-ethylhexyl)phthalate	зв ug/Kg	200U ug/Kg
TO63-RSP-SB03-0-0.5	Di-n-butylphthalate	35 ug/Kg	35U ug/Kg
TO63-RSP-SB03-5-6	Di-n-butylphthalate	28 ug/Kg	28U ug/Kg
	Bis(2-ethylhexyl)phthalate	80 ug/Kg	200U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria for samples on which NFESC Level IV review was performed. Raw data were not evaluated for the samples reviewed by NFESC Level III criteria.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples TO63-SPN-SB01-0-0.5 and TO63-SPN-SB01-0-0.5 Dup were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

	Concent		
Compound	TO63-SPN-SB01-0-0.5	TO63-SPN-SB01-0-0.5 Dup	RPD
Di-n-butylphthalate	24	50U	200
Bis(2-ethylhexyl)phthalate	26	27	4

XVII. Field Blanks

No field blanks were identified in this SDG.

Ballfields Parcels at DoDHF Novato, CA Semivolatiles - Data Qualification Summary - SDG K2502505

SDG	Sample	Compound	Flag	A or P	Reason
K2502505	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB02-0-0.5 TO63-R3-SB03-0-0.5** TO63-R4-SB03-0-0.5 TO63-R4-SB03-0-0.5 TO63-R4-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-0-0.5 TO63-RSP-SB03-0-0.5 TO63-RSP-SB03-0-0.5	4,6-Dinitro-2-methylphenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502505	TO63-R3-SB04-2-3**	2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502505	TO63-R4-SB03-0-0.5	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 2-Nitroaniline	J (all detects) UJ (all non-detects)	А	Continuing calibration (%D)
K2502505	TO63-R3-SB04-0-0.5	Hexachlorocyclopentadiene 2,4-Dinitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2502505	TO63-R3-SB01-0-0.5	N-Nitroso-di-n-propylamine	J (all detects) UJ (all non-detects)	Α	Continuing calibration (%D)
K2502505	TO63-R3-SB04-0-0.5 TO63-R3-SB01-0-0.5 TO63-R3-SB01-4-5 TO63-R3-SB03-0-0.5 TO63-R3-SB03-0-0.5 TO63-R4-SB03-0-0.5 TO63-R4-SB03-3-4 TO63-R4-SB01-0-0.5 TO63-SPN-SB03-4-5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-0-0.5 TO63-SPN-SB01-3-4** TO63-RSP-SB02-0-0.5 TO63-RSP-SB02-5-6** TO63-RSP-SB03-5-6 TO63-RSP-SB03-5-6	3,3'-Dichlorobenzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)

Ballfields Parcels at DoDHF Novato, CA Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K2502505

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502505	TO63-R3-SB04-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10U ug/Kg 200U ug/Kg	Α
K2502505	TO63-R3-SB04-2-3**	Bis(2-ethylhexyl)phthalate	200U ug/Kg	А
K2502505	TO63-R3-SB01-0-0.5	Di-n-butylphthalate	15U ug/Kg	Α
K2502505	TO63-R3-SB01-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	10U ug/Kg 200U ug/Kg	Α
K2502505	TO63-R3-SB02-0-0.5	Di-n-butylphthalate	22U ug/Kg	А
K2502505	TO63-R3-SB03-0-0.5**	Di-n-butylphthalate	15U ug/Kg	А
K2502505	TO63-R4-SB03-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	50U ug/Kg 1000U ug/Kg	Α
K2502505	TO63-R4-SB03-3-4	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	13U ug/Kg 200U ug/Kg	А
K2502505	TO63-R4-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	27U ug/Kg 200U ug/Kg	А
K2502505	TO63-R4-SB01-0-0.5**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	17U ug/Kg 200U ug/Kg	А
K2502505	TO63-SPN-SB03-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	35U ug/Kg 200U ug/Kg	А
K2502505	TO63-SPN-SB01-0-0.5 (5x)	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	50U ug/Kg 1000U ug/Kg	А
K2502505	TO63-SPN-SB01-0-0.5 Dup (5x)	Bis(2-ethylhexyl)phthalate	990U ug/Kg	Α
K2502505	TO63-SPN-SB01-3-4**	Di-n-butylphthalate	29U ug/Kg	Α
K2502505	TO63-RSP-SB02-0-0.5	Di n butylphthalate Bis(2-ethylhexyl)phthalate	41∪ ug/Kg 200∪ ug/Kg	А
K2502505	TO63-RSP-SB02-5-6**	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	36U ug/Kg 200U ug/Kg	А

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502505	TO63-RSP-SB03-0-0.5	Di-n-butylphthalate	35U ug/Kg	A
K2502505	TO63-RSP-SB03-5-6	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	28U ug/Kg 200U ug/Kg	А

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505 **Date Collected:** 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-R3-SB04-0-0.5
 Units:
 ug/Kg

 Lab Code:
 K2502505-001
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

	D 14 O	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result Q		5.6	1	04/13/05	05/04/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U	10 30	2.2	1	04/13/05	05/04/05	KWG0505825	
Phenol	ND U	10	2.8	1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND U				04/13/05	05/04/05	KWG0505825	
2-Chlorophenol	ND U	10	2.0 3.9	1 1	04/13/05	05/04/05	KWG0505825	
2-Methylphenol	ND U	10		1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND U	10	1.4			05/04/05	KWG0505825	
Acetophenone	ND U	50	14	1	04/13/05	05/04/05	KWG0505825	
4-Methylphenol†	ND U	10	3.3	1	04/13/05	05/04/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U	10	3.7	1	04/13/05			
Hexachloroethane	ND U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Nitrobenzene	ND U	10	2.3	1	04/13/05	05/04/05	KWG0505825	
Isophorone	ND U	10	1.9	1	04/13/05	05/04/05	KWG0505825	
2-Nitrophenol	ND U	10	3.0	1	04/13/05	05/04/05	KWG0505825	
2.4-Dimethylphenol	ND U	50	6.3	1	04/13/05	05/04/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
	ND U	10	2.1	1	04/13/05	05/04/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Naphthalene	ND U	10	2.4	1	04/13/05	05/04/05	KWG0505825	
4-Chloroaniline	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Hexachlorobutadiene	ND U 19 J	20	1.0	î	04/13/05	05/04/05	KWG0505825	
Caprolactam	19 J 11 J	20	10	î	04/13/05	05/04/05	KWG0505825	
Benzaldehyde			2.4	1	04/13/05	05/04/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	2.4 1.4	1	04/13/05	05/04/05	KWG0505825	
2-Methylnaphthalene	ND U	10	1. 4 17	1	04/13/05	05/04/05	KWG0505825	
Hexachlorocyclopentadiene	ND U UJ	50			04/13/05	05/04/05	KWG0505825	
2,4,6-Trichlorophenol	ND U	10	2.1	1	04/13/05	05/04/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	10	3.4	1	04/13/05	05/04/05	KWG0505825	
Biphenyl	ND U	20	5.5	1			KWG0505825	
2-Chloronaphthalene	ND U	10	4.1	1	04/13/05	05/04/05	KWG0505825	
2-Nitroaniline	ND U	20	3.1	1	04/13/05	05/04/05	KWG0505825	
Dimethyl Phthalate	ND U	10	2.1	1	04/13/05	05/04/05		
2,6-Dinitrotoluene	ND U	10	3.2	1	04/13/05	05/04/05	KWG0505825	
	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Acenaphthylene 3-Nitroaniline	ND U	20	3.0	1	04/13/05	05/04/05	KWG0505825	

Comments:

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Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505 **Date Collected:** 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB04-0-0.5 **Lab Code:** K2502505-001

Extraction Method: EPA 3541 **Analysis Method:** 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
	ND U	10	1.2	1	04/13/05	05/04/05	KWG0505825	Note
Acenaphthene 2,4-Dinitrophenol	ND U W	200	41	1	04/13/05	05/04/05	KWG0505825	
4-Nitrophenol	ND U	100	34	1	04/13/05	05/04/05	KWG0505825	
Dibenzofuran	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	3.2	1	04/13/05	05/04/05	KWG0505825	
Diethyl Phthalate	ND U	10	4.0	1	04/13/05	05/04/05	KWG0505825	
Fluorene	ND U	10	2.0	1	04/13/05	05/04/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10	2.3	1	04/13/05	05/04/05	KWG0505825	
4-Nitroaniline	ND U	20	3.9	1	04/13/05	05/04/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U UJ	100	2.0	1	04/13/05	05/04/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Hexachlorobenzene	ND U	10	2.4	1	04/13/05	05/04/05	KWG0505825	
Atrazine	ND U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Pentachlorophenol	ND U	100	9.7	1	04/13/05	05/04/05	KWG0505825	
Phenanthrene	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Anthracene	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Carbazole	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Di-n-butyl Phthalate	8.6 J 10U	10	3.0	1	04/13/05	05/04/05	KWG0505825	
Fluoranthene	ND U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Pyrene	ND U	10	1.5	1	04/13/05	05/04/05	KWG0505825	
Butyl Benzyl Phthalate	ND U	10	1.7	1	04/13/05	05/04/05	KWG0505825	
3,3'-Dichlorobenzidine	NDUUJ	100	4.2	1	04/13/05	05/04/05	KWG0505825	
Benz(a)anthracene	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Chrysene	ND U	10	1.6	1	04/13/05	05/04/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	62 J 200h	200	2.0	1	04/13/05	05/04/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10	1.4	1	04/13/05	05/04/05	KWG0505825	
Benzo(b)fluoranthene	ND U	10	2.9	1	04/13/05	05/04/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	2.9	1	04/13/05	05/04/05	KWG0505825	
Benzo(a)pyrene	ND U	10	1.9	1	04/13/05	05/04/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	10	2.2	1	04/13/05	05/04/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	2.5	1	04/13/05	05/04/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	10	2.6	1	04/13/05	05/04/05	KWG0505825	

Comments:

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Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project: Sample Matrix:

Soil

Date Collected: 04/06/2005

Service Request: K2502505

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB04-0-0.5

Lab Code:

K2502505-001

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	64	11-87	05/04/05	Acceptable	
Phenol-d6	71	20-99	05/04/05	Acceptable	
Nitrobenzene-d5	68	10-99	05/04/05	Acceptable	
2-Fluorobiphenyl	78	10-104	05/04/05	Acceptable	
2,4,6-Tribromophenol	87	23-113	05/04/05	Acceptable	
Terphenyl-d14	99	39-124	05/04/05	Acceptable	

† Analyte Comment	ts
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4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

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Comments:

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Form 1A - Organic 1083

Page 3 of 3

SuperSet Reference: RR47762

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505 Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB04-2-3

Lab Code:

K2502505-002

Extraction Method: EPA 3541 Analysis Method:

8270C

Units: ug/Kg Basis: Dry

Level: Low

	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name		10	8.4	1	04/13/05	05/08/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U 4.3 J	30	3.3	1	04/13/05	05/08/05	KWG0505825	
Phenol	ND U	10	4.1	1	04/13/05	05/08/05	KWG0505825	
Bis(2-chloroethyl) Ether		10	2.9	1	04/13/05	05/08/05	KWG0505825	
2-Chlorophenol	ND U	10	5.8	1	04/13/05	05/08/05	KWG0505825	
2-Methylphenol	ND U ND U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Bis(2-chloroisopropyl) Ether		50	2.1	1	04/13/05	05/08/05	KWG0505825	
Acetophenone	ND U	30 10	5.0	1	04/13/05	05/08/05	KWG0505825	
4-Methylphenol†	ND U	10	5.5	1	04/13/05	05/08/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U				04/13/05	05/08/05	KWG0505825	
Hexachloroethane	ND U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Nitrobenzene	ND U	10	3.4	1 1	04/13/05	05/08/05	KWG0505825	
Isophorone	ND U	10	2.8			05/08/05	KWG0505825	
2-Nitrophenol	ND U	10	4.5	1	04/13/05	05/08/05	KWG0505825	
2,4-Dimethylphenol	ND U	50	9.4	1	04/13/05 04/13/05	05/08/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	2.3	1				
2,4-Dichlorophenol	ND U	10	3.1	1	04/13/05	05/08/05	KWG0505825 KWG0505825	
Naphthalene	ND U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
4-Chloroaniline	ND U	10	3.6	1	04/13/05	05/08/05		
Hexachlorobutadiene	ND U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Caprolactam	ND U	21	21	1	04/13/05	05/08/05	KWG0505825	
Benzaldehyde	17 J	20	15	1	04/13/05	05/08/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	3.6	1	04/13/05	05/08/05	KWG0505825	
2-Methylnaphthalene	ND U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50	26	1	04/13/05	05/08/05	KWG0505825	
	ND U	10	3.1	1	04/13/05	05/08/05	KWG0505825	
2,4,6-Trichlorophenol	ND U	10	5.1	1	04/13/05	05/08/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	20	8.2	1	04/13/05	05/08/05	KWG0505825	
Biphenyl	ND U	10	6.2	1	04/13/05	05/08/05	KWG0505825	
2-Chloronaphthalene	ND U	20	4.6	1	04/13/05	05/08/05	KWG0505825	
2-Nitroaniline	ND U	10	3.1	1	04/13/05	05/08/05	KWG0505825	
Dimethyl Phthalate		10	4.8	1	04/13/05	05/08/05	KWG0505825	
2,6-Dinitrotoluene	ND U ND U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Acenaphthylene	ND U	20	4.5	1	04/13/05	05/08/05	KWG0505825	
3-Nitroaniline	ט עא	20	7.2		·			

Comments:

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Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:

TO63-R3-SB04-2-3 K2502505-002

Extraction Method: Analysis Method:

EPA 3541 8270C

Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
Acenaphthene	ND		10	1.7	1	04/13/05	05/08/05	KWG0505825	
2,4-Dinitrophenol		UUJ	200	62	1	04/13/05	05/08/05	KWG0505825	
4-Nitrophenol	ND	U	100	51	1	04/13/05	05/08/05	KWG0505825	
Dibenzofuran	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	4.8	1	04/13/05	05/08/05	KWG0505825	
Diethyl Phthalate	ND	U	10	6.0	1	04/13/05	05/08/05	KWG0505825	
Fluorene	ND	U	10	2.9	1	04/13/05	05/08/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	3.4	1	04/13/05	05/08/05	KWG0505825	
4-Nitroaniline	ND	U	20	5.8	1	04/13/05	05/08/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U	100	2.9	1	04/13/05	05/08/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Hexachlorobenzene	ND	U	10	3.6	1	04/13/05	05/08/05	KWG0505825	
Atrazine		U	10	3.8	1	04/13/05	05/08/05	KWG0505825	
Pentachlorophenol	ND	U	100	15	1	04/13/05	05/08/05	KWG0505825	
Phenanthrene	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Anthracene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Carbazole	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Di-n-butyl Phthalate	ND	U	10	4.5	1	04/13/05	05/08/05	KWG0505825	
Fluoranthene	ND		10	3.8	1	04/13/05	05/08/05	KWG0505825	
Pyrene	ND	U	10	2.3	1	04/13/05	05/08/05	KWG0505825	
Butyl Benzyl Phthalate	ND		10	2.6	1	04/13/05	05/08/05	KWG0505825	•
3,3'-Dichlorobenzidine	ND	U UJ	100	6.3	1	04/13/05	05/08/05	KWG0505825	
Benz(a)anthracene	ND	U	10	2.4	1	04/13/05	05/08/05	KWG0505825	
Chrysene	ND		10	2.4	1	04/13/05	05/08/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate		J 200 U	200	2.9	1	04/13/05	05/08/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	2.1	1	04/13/05	05/08/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	10	4.3	1	04/13/05	05/08/05	KWG0505825	
Benzo(k)fluoranthene	ND 1	U	10	4.3	1	04/13/05	05/08/05	KWG0505825	
Benzo(a)pyrene	ND 1	U	10	2.8	1	04/13/05	05/08/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND 1	U	10	3.3	1	04/13/05	05/08/05	KWG0505825	
Dibenz(a,h)anthracene	ND 1		10	3.8	1	04/13/05	05/08/05	KWG0505825	
Benzo(g,h,i)perylene	ND 1	U	10	3.9	1	04/13/05	05/08/05	KWG0505825	

Comments:

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Form 1A - Organic

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SuperSet Reference:

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RR47762

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB04-2-3

Lab Code:

K2502505-002

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	47	11-87	05/08/05	Acceptable	
Phenol-d6	54	20-99	05/08/05	Acceptable	
Nitrobenzene-d5	46	10-99	05/08/05	Acceptable	
2-Fluorobiphenyl	47	10-104	05/08/05	Acceptable	
2,4,6-Tribromophenol	57	23-113	05/08/05	Acceptable	
Terphenyl-d14	65	39-124	05/08/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic 1086

SuperSet Reference:

RR47762

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Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB01-0-0.5

Lab Code:

K2502505-003

Extraction Method: EPA 3541 **Analysis Method:**

8270C

Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	6.9	1	04/13/05	05/10/05	KWG0505825	
Phenol	ND	U	30	2.7	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.4	1	04/13/05	05/10/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.4	1	04/13/05	05/10/05	KWG0505825	
2-Methylphenol	ND		10	4.8	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND		10	1.7	1	04/13/05	05/10/05	KWG0505825	
Acetophenone	ND		50	17	1	04/13/05	05/10/05	KWG0505825	
4-Methylphenol†	ND		10	4.1	1	04/13/05	05/10/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND		10	4.5	1	04/13/05	05/10/05	KWG0505825	
Hexachloroethane	ND		10	3.1	1	04/13/05	05/10/05	KWG0505825	
Nitrobenzene	ND	-	10	2.8	1	04/13/05	05/10/05	KWG0505825	
Isophorone	ND		10	2.3	1	04/13/05	05/10/05	KWG0505825	
2-Nitrophenol	ND		10	3,7	1	04/13/05	05/10/05	KWG0505825	
2,4-Dimethylphenol	ND		50	7.7	1	04/13/05	05/10/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND		10	1.9	1	04/13/05	05/10/05	KWG0505825	
2,4-Dichlorophenol	ND		10	2.6	1	04/13/05	05/10/05	KWG0505825	
Naphthalene	ND		10	1.9	1	04/13/05	05/10/05	KWG0505825	
4-Chloroaniline	ND		10	3.0	1	04/13/05	05/10/05	KWG0505825	
Hexachlorobutadiene	ND		10	2.0	1	04/13/05	05/10/05	KWG0505825	
Caprolactam	ND		20	17	1	04/13/05	05/10/05	KWG0505825	
Benzaldehyde	14		20	13	1	04/13/05	05/10/05	KWG0505825	
	ND		10	3.0	1	04/13/05	05/10/05	KWG0505825	
4-Chloro-3-methylphenol	ND ND	U	10	1.7	1	04/13/05	05/10/05	KWG0505825	
2-Methylnaphthalene Hexachlorocyclopentadiene	ND ND		50	21	1	04/13/05	05/10/05	KWG0505825	
	ND		10	2.6	1	04/13/05	05/10/05	KWG0505825	
2,4,6-Trichlorophenol	ND ND		10	4.2	1	04/13/05	05/10/05	KWG0505825	
2,4,5-Trichlorophenol	ND ND		20	6.8	ı 1	04/13/05	05/10/05	KWG0505825	
Biphenyl			10	5.1	1	04/13/05	05/10/05	KWG0505825	
2-Chloronaphthalene	ND ND	U	20	3.8	1	04/13/05	05/10/05	KWG0505825	
2-Nitroaniline	ND ND		10	2.6	1	04/13/05	05/10/05	KWG0505825	
Dimethyl Phthalate			10	4.0	1	04/13/05	05/10/05	KWG0505825	
2,6-Dinitrotoluene		U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Acenaphthylene	ND ND	U	20	3.7	1	04/13/05	05/10/05	KWG0505825	
3-Nitroaniline	עא		۷.	J.1	*	3., 20, 00			

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Form 1A - Organic 1087

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SuperSet Reference: RR47762

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505 **Date Collected:** 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB01-0-0.5

Lab Code:

K2502505-003

Extraction Method:
Analysis Method:

EPA 3541 8270C Units: ug/Kg Basis: Dry

Level: Low

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
Acenaphthene	ND U	10	1.4	1	04/13/05	05/10/05	KWG0505825	
2,4-Dinitrophenol	ND U	200	51	1	04/13/05	05/10/05	KWG0505825	
4-Nitrophenol	ND U	100	42	1	04/13/05	05/10/05	KWG0505825	
Dibenzofuran	ND U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	4.0	1	04/13/05	05/10/05	KWG0505825	
Diethyl Phthalate	ND U	10	4.9	1	04/13/05	05/10/05	KWG0505825	
Fluorene	ND U	10	2.4	1	04/13/05	05/10/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10	2.8	1	04/13/05	05/10/05	KWG0505825	
4-Nitroaniline	ND U	20	4.8	1	04/13/05	05/10/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	DN U UN	100	2.4	1	04/13/05	05/10/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Hexachlorobenzene	ND U	10	3.0	1	04/13/05	05/10/05	KWG0505825	
Atrazine	ND U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Pentachlorophenol	ND U	100	12	1	04/13/05	05/10/05	KWG0505825	
Phenanthrene	ND U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Anthracene	ND U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Carbazole	ND U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Di-n-butyl Phthalate	15 V	10	3.7	1	04/13/05	05/10/05	KWG0505825	
Fluoranthene	ND U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Pyrene	ND U	10	1.9	1	04/13/05	05/10/05	KWG0505825	
Butyl Benzyl Phthalate	2.2 J	10	2.1	1	04/13/05	05/10/05	KWG0505825	
3,3'-Dichlorobenzidine	ND UUJ	100	5.2	1	04/13/05	05/10/05	KWG0505825	
Benz(a)anthracene	ND U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Chrysene	ND U	10	2.0	1	04/13/05	05/10/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	250	200	2.4	1	04/13/05	05/10/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10	1.7	1	04/13/05	05/10/05	KWG0505825	
Benzo(b)fluoranthene	ND U	10	3.5	1	04/13/05	05/10/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	3.5	1	04/13/05	05/10/05	KWG0505825	
Benzo(a)pyrene	ND U	10	2.3	1	04/13/05	05/10/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	10	2.7	1	04/13/05	05/10/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	3.1	1	04/13/05	05/10/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	10	3.3	1	04/13/05	05/10/05	KWG0505825	
Denzo(g,n,n)peryrene	1,20							

Comments:

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SuperSet Reference: RR47762

Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB01-0-0.5

Lab Code:

K2502505-003

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	51	11-87	05/10/05	Acceptable	
Phenol-d6	55	20-99	05/10/05	Acceptable	
Nitrobenzene-d5	49	10-99	05/10/05	Acceptable	
2-Fluorobiphenyl	61	10-104	05/10/05	Acceptable	
2,4,6-Tribromophenol	72	23-113	05/10/05	Acceptable	
Terphenyl-d14	80	39-124	05/10/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Merged

Form 1A - Organic

SuperSet Reference:

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1089

RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505 **Date Collected:** 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-R3-SB01-4-5
 Units:
 ug/Kg

 Lab Code:
 K2502505-004
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

Analysia Noma	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name 1,2,4,5-Tetrachlorobenzene	ND U	10	5.6	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND U	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND U	10	3.9	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND U	50	6.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND U	20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50	18	1	04/13/05	05/05/05	KWG0505825	
2.4.6-Trichlorophenol	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND U	20	5.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND U	20	3.1	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND U	20	3.0	1	04/13/05	05/05/05	KWG0505825	

Comments:

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SuperSet Reference:

Analytical Results

Client: Battelle Memorial Institute Project: Novato Ballfields/G486063

Sample Matrix: Soil Service Request: K2502505 Date Collected: 04/06/2005 Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB01-4-5 Lab Code: K2502505-004

Extraction Method: EPA 3541 **Analysis Method:** 8270C

Units: ug/Kg Basis: Dry

Level: Low

Analyte Name						Dilution	Date	Date	Extraction	
2,4-Dinitrophenol ND U 200 42 1 04/13/05 05/05/05 KWG0505825 A-Nitrophenol ND U 10 3.2 1 04/13/05 05/05/05 KWG0505825 Dienzofuran ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Dienzofuran ND U 10 3.2 1 04/13/05 05/05/05 KWG0505825 Diethyl Phthalate ND U 10 4.0 1 04/13/05 05/05/05 KWG0505825 Diethyl Phthalate ND U 10 2.0 1 04/13/05 05/05/05 KWG0505825 Fluorene ND U 10 2.0 1 04/13/05 05/05/05 KWG0505825 Hucran ND U 10 2.0 1 04/13/05 05/05/05 KWG0505825	Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
A-Nitrophenol	Acenaphthene	ND	U	10	1.2	1	04/13/05	05/05/05		
Dibenzofuran	2,4-Dinitrophenol	ND	U	200	42	1	04/13/05			
Dictar D	4-Nitrophenol	ND	U	100	35	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	Dibenzofuran	ND	U	10	1.5	1	04/13/05			
Filtorene ND U 10 2.0 1 04/13/05 05/05/05 KWG0505825	2,4-Dinitrotoluene			10		1				
4-Chlorophenyl Phenyl Ether ND U 10 2.3 1 04/13/05 05/05/05 KWG0505825	Diethyl Phthalate	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline ND U 20 3.9 1 04/13/05 05/05/05 KWG0505825 2-Methyl-4,6-dinitrophenol ND U 10 10 2.0 1 04/13/05 05/05/05 KWG0505825 N-Nitrosodiphenylamine ND U 10 16 2.6 1 04/13/05 05/05/05 KWG0505825 4-Bromophenyl Phenyl Ether ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 4-Bromophenyl Phenyl Ether ND U 10 2.4 1 04/13/05 05/05/05 KWG0505825 Hexachlorobenzene ND U 10 2.4 1 04/13/05 05/05/05 KWG0505825 Attrazine ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pentachlorophenol ND U 100 9.8 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthracene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Pilnoranthene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Benz(a)anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Benz(a)anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 0 2.2 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND	Fluorene	ND	U	10	2.0	1	04/13/05	05/05/05		
2-Methyl-4,6-dimitrophenol ND U	4-Chlorophenyl Phenyl Ether			10	2.3	1	04/13/05			
N-Nitrosodiphenylamine ABD U 10 2.6 1 04/13/05 05/05/05 KWG0505825 A-Bromophenyl Phenyl Ether ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Hexachlorobenzene ND U 10 2.4 1 04/13/05 05/05/05 KWG0505825 Atrazine ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pentachlorophenol ND U 100 9.8 1 04/13/05 05/05/05 KWG0505825 Pentachlorophenol ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Anthracene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Di-n-butyl Phthalate 9.1 J / O U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U 10 1.6 1.6 1 04/13/05 05/05/05 KWG0505825 Flutyl Phthalate ND U	4-Nitroaniline	ND	U	20	3.9	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Hexachlorobenzene ND U 10 2.4 1 04/13/05 05/05/05 KWG0505825 Atrazine ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pentachlorophenol ND U 100 9.8 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Attrazine ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.5 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Benz/(a)anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Benz/(a)anthracene ND U 10 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benz/(b)fluoranthene ND U 10 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benz/(a)pyrene ND U 10 10 10 10 10 10 10 10 10 1	2-Methyl-4,6-dinitrophenol	ND	UUJ	100	2.0	1	04/13/05			
Hexachlorobenzene	N-Nitrosodiphenylamine	ND	U	10	2.6	1				
Atrazine ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pentachlorophenol ND U 100 9.8 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Anthracene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Di-n-butyl Phthalate 9.1 J / 0 V 10 3.0 1 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 S3,3'-Dichlorobenzidine ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Benzya(a)anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Chrysene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzo(b)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(b)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825	4-Bromophenyl Phenyl Ether	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol ND U 100 9.8 1 04/13/05 05/05/05 KWG0505825 Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Di-n-butyl Phthalate 9.1 J /0 V 10 3.0 1 04/13/05 05/05/05 KWG0505825 Pluoranthene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Benzyl Anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Benzyl Anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG050825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Benzyl Phthalate ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Biblenzyl Phthalate ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Biblenzyl Phthalate ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Biblenzyl Phthalate ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Biblenzyl Phthalate ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Hexachlorobenzene	ND	U	10		1				
Phenanthrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 EWG0505825 EWG0505825 EWG0505825 Fluoranthene ND U 10 10 1.5 1 04/13/05 05/05/05 EWG0505825 EWG0505825 Fluoranthene ND U 10 1.5 1 04/13/05 05/05/05 EWG0505825 EWG0605825 EWG060582	Atrazine	ND	U	10		1				
Anthracene	Pentachlorophenol	ND	U	100	9.8	1	04/13/05	05/05/05	KWG0505825	
Carbazole ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Di-n-butyl Phthalate 9.1 J I 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 4.3 1 04/13/05 05/05/05 KWG0505825 Benzyl Benzyl Phthalate ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Chrysene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 <	Phenanthrene	ND	U	10	1.5	1	04/13/05	05/05/05		
Di-n-butyl Phthalate 9.1 J /O L 10 3.0 1 04/13/05 05/05/05 KWG0505825 Fluoranthene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 Pyrene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Butyl Benzyl Phthalate ND U 100 4.3 1 04/13/05 05/05/05 KWG0505825 Benz(a)anthracene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Chrysene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate 51 J 200 U 200 2.0 1 04/13/05 05/05/05 KWG0505825 Bis(2-ethylhexyl) Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzo(b)fluoranthene ND U	Anthracene	ND	U	10	1.6	1	04/13/05	05/05/05		
Fluoranthene	Carbazole	ND		10	1.5	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	Di-n-butyl Phthalate	9.1	J 10W	10	3.0	1		05/05/05		
Butyl Benzyl Phthalate ND U	Fluoranthene		U	10	2.6	1	04/13/05			
3,3'-Dichlorobenzidine ND U \(\) 100 \(\) 4.3 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Benz(a)anthracene ND U \(\) 10 \(\) 1.6 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Chrysene ND U \(\) 10 \(\) 1.6 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Bis(2-ethylhexyl) Phthalate S1 \(\) \(\) 200 \(\) 200 \(\) 2.0 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Di-n-octyl Phthalate ND U \(\) 10 \(\) 1.4 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Benzo(b)fluoranthene ND U \(\) 10 \(\) 2.9 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Benzo(k)fluoranthene ND U \(\) 10 \(\) 2.9 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Benzo(a)pyrene ND U \(\) 10 \(\) 1.9 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Indeno(1,2,3-cd)pyrene ND U \(\) 10 \(\) 2.2 \(\) 1 \(\) 04/13/05 \(\) 05/05/05 \(\) KWG0505825 Dibenz(a,h)anthracene	Pyrene	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine ND U \(\mathcal{I} \) 100 \(4.3 \) 1 \(04/13/05 \) 05/05/05 \(KWG0505825 \) Benz(a)anthracene ND U \(10 \) 1.6 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Chrysene ND U \(10 \) 1.6 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Bis(2-ethylhexyl) Phthalate S1 \(J \) 200 \(M \) 200 \(2.0 \) 1 \(04/13/05 \) 05/05/05 \(KWG0505825 \) Di-n-octyl Phthalate ND U \(10 \) 1.4 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Benzo(b)fluoranthene ND U \(10 \) 2.9 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Benzo(k)fluoranthene ND U \(10 \) 2.9 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Benzo(a)pyrene ND U \(10 \) 1.9 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Dibenz(a,h)anthracene ND U \(10 \) 2.2 \(1 \) 04/13/05 \(05/05/05 \) KWG0505825 Dibenz(a,h)anthracene	Butyl Benzyl Phthalate	ND	U	10	1.8	1	04/13/05	05/05/05		
Chrysene		ND	UUJ	100	4.3	1				
Bis(2-ethylhexyl) Phthalate 51 J 200 M 200 2.0 1 04/13/05 05/05/05 KWG0505825 Di-n-octyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzo(b)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Benz(a)anthracene	ND	U	10	1.6	1	04/13/05	05/05/05		
Di-n-octyl Phthalate ND U 10 1.4 1 04/13/05 05/05/05 KWG0505825 Benzo(b)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Chrysene	ND	U			1				
Benzo(b)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(k)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825 WG0505825	Bis(2-ethylhexyl) Phthalate	51	J 200 M	200		1				
Benzo(k)fluoranthene ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Di-n-octyl Phthalate	ND	U	10	1.4	1	04/13/05	05/05/05		
Benzo(a)pyrene ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825 Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Benzo(b)fluoranthene	ND	U	10	2.9	1	04/13/05			
Indeno(1,2,3-cd)pyrene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Benzo(k)fluoranthene	ND	U	10	2.9	1	04/13/05			
Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	` '	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825	Indeno(1,2,3-cd)pyrene	ND	U	10	2.2	1	04/13/05			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ND	U	10		1	04/13/05			
		ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project: Sample Matrix:

Soil

Service Request: K2502505 Date Collected: 04/06/2005 Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:

TO63-R3-SB01-4-5

K2502505-004

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	57	11-87	05/05/05	Acceptable	
Phenol-d6	66	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	62	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	70	10-104	05/05/05	Acceptable	
2.4.6-Tribromophenol	78	23-113	05/05/05	Acceptable	
Terphenyl-d14	103	39-124	05/05/05	Acceptable	

† Analyte Con	nments
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4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Soil Sample Matrix:

Service Request: K2502505 Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Units: ug/Kg TO63-R3-SB02-0-0.5 Sample Name: Basis: Dry Lab Code: K2502505-005 Level: Low EPA 3541 **Extraction Method:**

8270C **Analysis Method:**

	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name		10	5.6	1	04/13/05	05/05/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U 2.8 J	30	2.2	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether			2.0	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND U	10 10	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND U					05/05/05	KWG0505825	
Acetophenone	23 J	50	14	1	04/13/05 04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND U	10	3.3	1			KWG0505825	
N-Nitrosodi-n-propylamine	ND U	10	3.7	1	04/13/05	05/05/05		
Hexachloroethane	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND U	50	6.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	11 J	20	10	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50	18	1	04/13/05	05/05/05	KWG0505825	
2.4.6-Trichlorophenol	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND U	20	5.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND U	20	3.1	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND U	20	3.0	1	04/13/05	05/05/05	KWG0505825	

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Form 1A - Organic

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Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Sample Matrix: Soil Service Request: K2502505 Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Units: ug/Kg

Basis: Dry

Level: Low

Semi-Volatile Organic Compounds by GC/MS

TO63-R3-SB02-0-0.5 Sample Name: Lab Code: K2502505-005

EPA 3541 **Extraction Method:** 8270C **Analysis Method:**

				Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
Acenaphthene	ND U	10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	200	41	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	100	35	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	10	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	20	3.9	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND UUS	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	100	9.7	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	3.6 J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	22 V	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	4.8 J	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	4.3 J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	1.8 J	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U UJ	100	4.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	5.1 J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	130 J	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	4.6 J	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	2.3 J	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	3.9 J	10	2.7	- Second	04/13/05	05/05/05	KWG0505825	*****

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005 Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB02-0-0.5

Lab Code:

K2502505-005

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	48	11-87	05/05/05	Acceptable	
Phenol-d6	58	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	55	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	80	23-113	05/05/05	Acceptable	
Terphenyl-d14	111	39-124	05/05/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R3-SB03-0-0.5 **Lab Code:** K2502505-006

Extraction Method: EPA 3541 **Analysis Method:** 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Dilution Date Date **Extraction** MRL MDL Analyte Name Result Q **Factor** Extracted Analyzed Lot Note 1,2,4,5-Tetrachlorobenzene ND U 05/05/05 KWG0505825 10 5.9 1 04/13/05 Phenol 2.4 J 30 2.3 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroethyl) Ether ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825 2-Chlorophenol ND U 10 2.1 1 04/13/05 05/05/05 KWG0505825 2-Methylphenol ND U 10 4.1 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroisopropyl) Ether ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825 Acetophenone ND U 50 15 1 04/13/05 05/05/05 KWG0505825 4-Methylphenol† ND U 10 3.5 KWG0505825 1 04/13/05 05/05/05 N-Nitrosodi-n-propylamine ND U 10 3.9 1 04/13/05 05/05/05 KWG0505825 Hexachloroethane ND U 10 2.7 1 04/13/05 05/05/05 KWG0505825 Nitrobenzene ND U 2.4 10 04/13/05 05/05/05 KWG0505825 1 Isophorone ND U 10 2.0 05/05/05 KWG0505825 1 04/13/05 2-Nitrophenol ND U 10 3.2 KWG0505825 1 04/13/05 05/05/05 2.4-Dimethylphenol ND U 50 6.6 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroethoxy)methane ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825 2,4-Dichlorophenol ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 Naphthalene 2.5 J KWG0505825 10 1.6 1 04/13/05 05/05/05 4-Chloroaniline ND U 10 2.6 04/13/05 05/05/05 KWG0505825 1 Hexachlorobutadiene ND U 10 1.7 1 04/13/05 05/05/05 KWG0505825 Caprolactam ND U 20 15 1 04/13/05 05/05/05 KWG0505825 20 Benzaldehyde ND U 11 1 04/13/05 05/05/05 KWG0505825 4-Chloro-3-methylphenol ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 **4.4** J 2-Methylnaphthalene 10 1.5 1 04/13/05 05/05/05 KWG0505825 ND U 50 KWG0505825 Hexachlorocyclopentadiene 18 1 04/13/05 05/05/05 KWG0505825 2.4.6-Trichlorophenol ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825 2,4,5-Trichlorophenol ND U 10 36 1 04/13/05 05/05/05 5.8 KWG0505825 ND U 20 Biphenyl 1 04/13/05 05/05/05 10 4.3 1 05/05/05 KWG0505825 2-Chloronaphthalene ND U 04/13/05 KWG0505825 2-Nitroaniline ND U 20 3.3 1 04/13/05 05/05/05 KWG0505825 10 2.2 1 Dimethyl Phthalate ND U 04/13/05 05/05/05 2.6-Dinitrotoluene ND U 10 3.4 1 04/13/05 05/05/05 KWG0505825 ND U 10 1.7 1 04/13/05 05/05/05 KWG0505825 Acenaphthylene 3-Nitroaniline 20 3.2 1 04/13/05 05/05/05 KWG0505825 ND U

Comments:

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1096

SuperSet Reference:

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB03-0-0.5

Lab Code:

K2502505-006

Extraction Method: Analysis Method:

EPA 3541 8270C Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
Acenaphthene	ND	U	10	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND	U	200	43	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND	U	100	36	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.4	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND	U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	UUJ	100	2.1	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND	U	100	11	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	7.1	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	2.2	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	15	u	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	6.6	J	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Pyrene	6.5	J	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U /	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	UUJ	100	4.5	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	3.0	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Chrysene	7.2	J	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	370		200	2.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	8.0	J	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	8.5	J	10	2.0	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	7.3		10	2.3	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	11		10	2.8	1	04/13/05	05/05/05	KWG0505825	

Comments:

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Form 1A - Organic 1097

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Merged

SuperSet Reference: RR47762

Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R3-SB03-0-0.5

Lab Code:

K2502505-006

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	41	11-87	05/05/05	Acceptable	
Phenol-d6	52	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	53	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	67	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	77	23-113	05/05/05	Acceptable	
Terphenyl-d14	112	39-124	05/05/05	Acceptable	

÷	Analyte	Comments
7	-	COMMISSION

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

3 of 3 Page

Form 1A - Organic

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Sample Matrix: Soil Service Request: K2502505 Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

TO63-R4-SB03-0-0.5 Sample Name: Lab Code: K2502505-007

EPA 3541 **Extraction Method: Analysis Method:** 8270C

Units: ug/Kg Basis: Dry

Level: Low

		_	MDI	MINI	Dilution	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result		MRL	MDL	Factor		05/03/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND		50	27	5	04/13/05	05/03/05	KWG0505825	
Phenol	ND		150	11	5	04/13/05 04/13/05	05/03/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND		50	13	5			KWG0505825	
2-Chlorophenol	ND		50	9.2	5	04/13/05	05/03/05	KWG0505825	
2-Methylphenol	ND		50	19	5	04/13/05	05/03/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	6.5	5	04/13/05	05/03/05		
Acetophenone	ND	U	250	65	5	04/13/05	05/03/05	KWG0505825	
4-Methylphenol†	ND		50	16	5	04/13/05	05/03/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	18	5	04/13/05	05/03/05	KWG0505825	
Hexachloroethane	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Nitrobenzene	ND	U	50	11	5	04/13/05	05/03/05	KWG0505825	
Isophorone	ND	U	50	8.7	5	04/13/05	05/03/05	KWG0505825	
2-Nitrophenol	ND	U	50	15	5	04/13/05	05/03/05	KWG0505825	
2,4-Dimethylphenol	ND		250	30	5	04/13/05	05/03/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND		50	7.1	5	04/13/05	05/03/05	KWG0505825	
2,4-Dichlorophenol	ND		50	9.8	5	04/13/05	05/03/05	KWG0505825	
Naphthalene	ND ND		50	7.1	5	04/13/05	05/03/05	KWG0505825	
4-Chloroaniline	ND		50	12	5	04/13/05	05/03/05	KWG0505825	
Hexachlorobutadiene	ND		50	7.6	5	04/13/05	05/03/05	KWG0505825	
	ND ND		100	65	5	04/13/05	05/03/05	KWG0505825	
Caprolactam Benzaldehyde	ND ND		100	48	5	04/13/05	05/03/05	KWG0505825	
		U	50	12	5	04/13/05	05/03/05	KWG0505825	1440
4-Chloro-3-methylphenol	ND	U	50	6.5	5	04/13/05	05/03/05	KWG0505825	
2-Methylnaphthalene	ND ND	บนร	250	81	5	04/13/05	05/03/05	KWG0505825	
Hexachlorocyclopentadiene				9.8	5	04/13/05	05/03/05	KWG0505825	
2,4,6-Trichlorophenol	ND		50 50	9.8 17	5	04/13/05	05/03/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U		26	5	04/13/05	05/03/05	KWG0505825	
Biphenyl	ND		100			04/13/05	05/03/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	20	5	04/13/05	05/03/05	KWG0505825	
2-Nitroaniline	ND	UUJ	100	15	5	04/13/05	05/03/05	KWG0505825	
Dimethyl Phthalate	ND		50	9.8	5			KWG0505825	
2,6-Dinitrotoluene	ND		50	16	5	04/13/05	05/03/05	KWG0505825	
Acenaphthylene	ND		50	7.6	5	04/13/05	05/03/05	KWG0505825	
3-Nitroaniline	ND	U	100	15	5	04/13/05	05/03/05		

Comments:

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RR47762

SuperSet Reference:

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R4-SB03-0-0.5

Lab Code:

K2502505-007

Extraction Method: Analysis Method:

EPA 3541 8270C Units: ug/Kg Basis: Dry

Level: Low

Auglieta Nama	Result	0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	ND		50	5.4	5	04/13/05	05/03/05	KWG0505825	
Acenaphthene 2,4-Dinitrophenol	ND ND		1000	200	5	04/13/05	05/03/05	KWG0505825	
4-Nitrophenol	ND		500	170	5	04/13/05	05/03/05	KWG0505825	
Dibenzofuran	ND		50	7.1	5	04/13/05	05/03/05	KWG0505825	
2,4-Dinitrotoluene	ND		50	16	5	04/13/05	05/03/05	KWG0505825	
Diethyl Phthalate	ND		50	19	5	04/13/05	05/03/05	KWG0505825	
Fluorene	ND	U	50	9.2	5	04/13/05	05/03/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	Ū	50	11	5	04/13/05	05/03/05	KWG0505825	
4-Nitroaniline	ND	U	100	19	5	04/13/05	05/03/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND	U UJ	500	9.2	5	04/13/05	05/03/05	KWG0505825	
N-Nitrosodiphenylamine	ND		50	12	5	04/13/05	05/03/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Hexachlorobenzene	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Atrazine	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Pentachlorophenol	ND	U	500	46	5	04/13/05	05/03/05	KWG0505825	
Phenanthrene	ND	U	50	7.1	5	04/13/05	05/03/05	KWG0505825	
Anthracene	ND	U	50	7.6	5	04/13/05	05/03/05	KWG0505825	
Carbazole	ND	U	50	7.1	5	04/13/05	05/03/05	KWG0505825	
Di-n-butyl Phthalate	31	ID 50 C	50	15	5	04/13/05	05/03/05	KWG0505825	
Fluoranthene	ND	U	50	12	5	04/13/05	05/03/05	KWG0505825	
Pyrene	9.4	JD	50	7.1	5	04/13/05	05/03/05	KWG0505825	
Butyl Benzyl Phthalate	ND		50	8.1	5	04/13/05	05/03/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	UW	500	20	5	04/13/05	05/03/05	KWG0505825	
Benz(a)anthracene	ND	U	50	7.6	5	04/13/05	05/03/05	KWG0505825	
Chrysene	ND		50	7.6	5	04/13/05	05/03/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	58	JD /000 U		9.2	5	04/13/05	05/03/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	50	6.5	5	04/13/05	05/03/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	50	14	5	04/13/05	05/03/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	50	14	5	04/13/05	05/03/05	KWG0505825	
Benzo(a)pyrene	ND	U	50	8.7	5	04/13/05	05/03/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	50	11	5	04/13/05	05/03/05	KWG0505825	
Dibenz(a,h)anthracene	ND		50	12	5	04/13/05	05/03/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	50	13	5	04/13/05	05/03/05	KWG0505825	

Comments:

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Analytical Results

Client:

Battelle Memorial Institute

Project: Sample Matrix:

Soil

Novato Ballfields/G486063

Service Request: K2502505

Date Received: 04/07/2005

Date Collected: 04/06/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R4-SB03-0-0.5

Lab Code:

K2502505-007

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	58	11-87	05/03/05	Acceptable	
Phenol-d6	69	20-99	05/03/05	Acceptable	
Nitrobenzene-d5	72	10-99	05/03/05	Acceptable	
2-Fluorobiphenyl	77	10-104	05/03/05	Acceptable	
2,4,6-Tribromophenol	77	23-113	05/03/05	Acceptable	
Terphenyl-d14	96	39-124	05/03/05	Acceptable	

Ť	Ana	lyte	Comments
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4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:

TO63-R4-SB03-3-4 K2502505-008

Extraction Method: EPA 3541 Analysis Method:

8270C

Units: ug/Kg Basis: Dry

Level: Low

	D-114 O	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result Q				04/13/05	05/05/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U	10	7.7 3.0	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND U	30	3.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND U	10				05/05/05	KWG0505825	
2-Chlorophenol	ND U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND U	10	5.4	1	04/13/05 04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND U	10	1.9	1			KWG0505825	
Acetophenone	ND U	50	19	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U	10	5.0	1	04/13/05	05/05/05		
Hexachloroethane	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND U	50	8.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Naphthalene 4-Chloroaniline	ND U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	Name and Address of the Owner, when the Owner,
Hexachlorobutadiene	ND U	20	19	ì	04/13/05	05/05/05	KWG0505825	
Caprolactam	23	20	14	î	04/13/05	05/05/05	KWG0505825	
Benzaldehyde			3.3	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	3.3 1.9	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND U	10	24	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50				05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND U	20	7.5	1	04/13/05		KWG0505825	
2-Chloronaphthalene	ND U	10	5.7	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND U	20	4.3	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND U	10	2.9	1	04/13/05	05/05/05		
2,6-Dinitrotoluene	ND U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND U	20	4.1	1	04/13/05	05/05/05	KWG0505825	
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Comments:

1 of 3 Page

RR47762

SuperSet Reference:

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Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/06/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-R4-SB03-3-4
 Units:
 ug/Kg

 Lab Code:
 K2502505-008
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

	D 14 0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result Q				04/13/05	05/05/05	KWG0505825	
Acenaphthene	ND U	10	1.6 57	1 1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	200	37 47	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	100				05/05/05	KWG0505825	
Dibenzofuran	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	10	5.5	1	04/13/05		KWG0505025	
Fluorene	ND U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	20	5.4	1	04/13/05	05/05/05		
2-Methyl-4,6-dinitrophenol	LN U DN	100	2.7	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	100	14	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Carbazole	13 1/2	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	ND U	10	3.5	ĺ	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Pyrene		10	2.4	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U	100	5.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U UJ ND U	100	2.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene					04/13/05	05/05/05	KWG0505825	
Chrysene	ND U 23 J 200	10	2.2 2.7	1 1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate			2.7 1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10					KWG0505825	
Benzo(b)fluoranthene	ND U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND U	10	2.5	1	04/13/05	05/05/05		
Indeno(1,2,3-cd)pyrene	ND U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	10	3.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

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Analytical Results

Client: Battelle Memorial Institute Project:

Novato Ballfields/G486063

Soil

Service Request: K2502505 Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB03-3-4 Lab Code: K2502505-008

Sample Matrix:

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	51	11-87	05/05/05	Acceptable	
Phenol-d6	60	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	49	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	59	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	86	23-113	05/05/05	Acceptable	
Terphenyl-d14	106	39-124	05/05/05	Acceptable	

۴	Ana	lyte	Comments
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4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic 1104

SuperSet Reference:

RR47762

3 of 3

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Sample Matrix: Soil Service Request: K2502505 Date Collected: 04/06/2005 Date Received: 04/07/2005

Units: ug/Kg

Basis: Dry

Level: Low

Semi-Volatile Organic Compounds by GC/MS

TO63-R4-SB02-0-0.5 Sample Name: Lab Code: K2502505-009

Extraction Method: EPA 3541 8270C **Analysis Method:**

Analyte Name	Result	0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND		9.9	5.5	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND		30	2.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	9.9	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	9.9	3.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	9.9	3.6	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND		9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND		9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	9.9	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	6.2	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	14	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	20	9.8	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	17	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	9.9	3.4	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.4	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	9.9	4.0	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.0	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	9.9	3.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	3.2	J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	2.9	1	04/13/05	05/05/05	KWG0505825	

Comments:

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RR47762

1105

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SuperSet Reference:

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Soil Sample Matrix:

Service Request: K2502505 Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Units: ug/Kg TO63-R4-SB02-0-0.5 Sample Name: Basis: Dry K2502505-009 Lab Code: Level: Low EPA 3541 **Extraction Method:**

8270C **Analysis Method:**

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND U	9.9	1.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	200	40	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	99	34	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	9.9	3.2	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	9.9	3.9	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	20	3.8	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U WI	99	1.9	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND U	9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	99	9.5	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	7.2 J	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Anthracene	2.7 J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	2.3 J	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	27 U	9.9	2.9	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	22	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	18	9.9	1.5	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	3.7 J	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U UJ	99	4.2	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	9.8 J	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	18	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	69 J 200 U	200	1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	26	9.9	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	8.5 J	9.9	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	16	9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	20	9.9	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	4.0 J	9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	22	9.9	2.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

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SuperSet Reference: RR47762

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Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R4-SB02-0-0.5

Lab Code:

K2502505-009

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	42	11-87	05/05/05	Acceptable	
Phenol-d6	53	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	52	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	72	23-113	05/05/05	Acceptable	
Terphenyl-d14	104	39-124	05/05/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

SuperSet Reference:

RR47762

Page

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Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/06/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-R4-SB01-0-0.5
 Units:
 ug/Kg

 Lab Code:
 K2502505-010
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

Analyte Name Result Q MRL MDL Factor Extracted Analyzed Lot Not 1,2,4,5-Tetrachlorobenzene ND U 10 5.3 1 04/13/05 05/05/05 KWG0505825 Phenol ND U 30 2.1 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroethyl) Ether ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 2-Chlorophenol ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825	
1,2,4,5-Tetrachlorobenzene ND U 10 5.3 1 04/13/05 05/05/05 KWG0505825 Phenol ND U 30 2.1 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroethyl) Ether ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 2-Chlorophenol ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825	Analyte Name
Phenol ND U 30 2.1 1 04/13/05 05/05/05 KWG0505825 Bis(2-chloroethyl) Ether ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 2-Chlorophenol ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825	
Bis(2-chloroethyl) Ether ND U 10 2.6 1 04/13/05 05/05/05 KWG0505825 2-Chlorophenol ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825	, , ,
2-Chlorophenol ND U 10 1.9 1 04/13/05 05/05/05 KWG0505825	
2-Methylphenol ND U 10 3.7 1 04/13/05 05/05/05 KWG0303823	
Bis(2-chloroisopropyl) Ether ND U 10 1.3 1 04/13/05 05/05/05 KWG0505825	
Acetophenone ND U 50 13 1 04/13/05 05/05/05 KWG0505825	
4-Methylphenol† ND U 10 3.2 1 04/13/05 05/05/05 KWG0505825	
N-Nitrosodi-n-propylamine ND U 10 3.5 1 04/13/05 05/05/05 KWG0505825	
Hexachloroethane ND U 10 2.4 1 04/13/05 05/05/05 KWG0505825	
Nitrobenzene ND U 10 2.2 1 04/13/05 05/05/05 KWG0505825	
Isophorone ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825	
2-Nitrophenol ND U 10 2.9 1 04/13/05 05/05/05 KWG0505825	_
2.4-Dimethylphenol ND U 50 6.0 1 04/13/05 05/05/05 KWG0505825	
Bis(2-chloroethoxy)methane ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825	
2,4-Dichlorophenol ND U 10 2.0 1 04/13/05 05/05/05 KWG0505825	
Naphthalene ND U 10 1.5 1 04/13/05 05/05/05 KWG0505825	
4-Chloroaniline ND U 10 2.3 1 04/13/05 05/05/05 KWG0505825	
Hexachlorobutadiene ND U 10 1.6 1 04/13/05 05/05/05 KWG0505825	
Hexachiorobulatione ND U 20 13 1 04/13/05 05/05/05 KWG0505825 Caprolactam ND U 20 13 1 04/13/05 05/05/05 KWG0505825	
Benzaldehyde ND U 20 9.6 1 04/13/05 05/05/05 KWG0505825	
Delizationy to 1 04/12/05 05/05/05 VWG0505825	
4-Cmoro-3-methylphenor	
2-Methymaphinaene 100 0 10 100 0 105 05 05 05 05 05 05 05 05 05 05 05 05 0	
Hexachiorocyclopentadiene ND 0 30 17 105 105 105 105 105 105 105 105 105 105	
2,4,6-1 richlorophenol ND 0 10 20 1 0 0 10 10 10 10 10 10 10 10 10 10 10	
2,4,5-1 richiorophenoi 10 5.0 1 04/13/05 05/05/05 KWG0505825	
Biphenyl AD 0 20 3.2 The AD 105 OF 105 INS VWG0505825	
2-Chloronaphthalene ND U 10 3.0 1 04/13/05 05/05/05 KWG0505825	<u> </u>
2-Nitroaniline ND U 20 3.0 1 04/13/05 05/05/05 KWG0505825	
Dimethyl Phthalate ND 0 10 2.0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Dimethyl Phthalate
2,6-Dinitrotoluene ND U 10 5.1 1 04/13/05 05/05/05 KW/G0505825	
Acenaphthylene ND U 10 1.0 1 04/12/05 05/05/05 VW/G0505825	Acenaphthylene
3-Nitroaniline ND U 20 2.9 1 04/13/05 05/05/05 KWG0505825	3-Nitroaniline

Comments:

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Form 1A - Organic 1108

Page 1 01 RR47762

SuperSet Reference:

Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Collected: 04/06/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-R4-SB01-0-0.5

Lab Code:

K2502505-010

Extraction Method: Analysis Method:

EPA 3541 8270C Units: ug/Kg
Basis: Dry
Level: Low

•	~ × 0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result Q			1	04/13/05	05/05/05	KWG0505825	
Acenaphthene	ND U	10	1.1 39	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	200	33	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	100			04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	10	3.8		04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	10	1.9	1	04/13/03	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	20	3.7	1			KWG0505825	
2-Methyl-4,6-dinitrophenol	LN U DN	100	1.9	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	1.6	1	04/13/05	05/05/05		
Hexachlorobenzene	ND U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	100	9.2	1	04/13/05	05/05/05	KWG0505825	
	1.5 J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Carbazole	17	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	1.9 J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U UJ	100	4.0	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U	100	1.6	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene			1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND U	10	1.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	18 J 200		1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10			04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND U	10	1.8	1			KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	10	2.1	1	04/13/05	05/05/05 05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	10	2.5	Jones	04/13/05	03/03/03	1211 000 00 000	

Comments:

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Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/06/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:

TO63-R4-SB01-0-0.5

K2502505-010

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	51	11-87	05/05/05	Acceptable	
Phenol-d6	62	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	54	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	65	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	74	23-113	05/05/05	Acceptable	
Terphenyl-d14	104	39-124	05/05/05	Acceptable	

Ť	Ana	lyte	Comments
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4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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RR47762 SuperSet Reference:

Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project: Sample Matrix:

Soil

Service Request: K2502505 Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-SPN-SB03-4-5

Lab Code:

K2502505-011

Extraction Method: EPA 3541 **Analysis Method:**

8270C

Units: ug/Kg Basis: Dry

Level: Low

	D 1/ 0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result Q				04/13/05	05/05/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U	10	7.7	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND U	30	3.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND U	10	3.8	1			KWG0505825	
2-Chlorophenol	ND U	10	2.7	l	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND U	10	5.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND U	10	1.9	1	04/13/05	05/05/05		
Acetophenone	ND U	50	19	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U	10	5.0	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
	ND U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol 2,4-Dimethylphenol	ND U	50	8.6	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline				1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND U	10	2.2 19	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND U	20		1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND U	20	14				KWG0505825	
4-Chloro-3-methylphenol	ND U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50	24	1	04/13/05	05/05/05		
2,4,6-Trichlorophenol	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
2.4.5-Trichlorophenol	ND U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND U	20	7.5	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND U	10	5.7	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND U	20	4.3	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
·	ND U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND U	20	4.1	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ט עאו	20	***	-				

Comments:

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/05/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB03-4-5
Lab Code: K2502505-011

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

A J 42 Name	Result	0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	ND		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Acenaphthene			200	57	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol 4-Nitrophenol	ND		100	47	1	04/13/05	05/05/05	KWG0505825	
	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND ND		10	4.4	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene Diethyl Phthalate	ND		10	5.5	1	04/13/05	05/05/05	KWG0505825	
	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Fluorene 4-Chlorophenyl Phenyl Ether	ND ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline			20	5.4	1	04/13/05	05/05/05	KWG0505825	
			UJ 100	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND ND		100 IOO	3.5	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine 4-Bromophenyl Phenyl Ether	ND ND		10	2.2	1	04/13/05	05/05/05	KWG0505825	
A				3.3	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND ND		10 10	3.5	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND ND		100	14	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol						04/13/05	05/05/05	KWG0505825	
Phenanthrene		-	10	2.1 2.2	1 1	04/13/05	05/05/05	KWG0505825	
Anthracene			10	2.2	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND		10			04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	35		10	4.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene		U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene			10	2.1	1			KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine				5.8	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND		10	2.2	1	04/13/05	05/05/05		
Chrysene	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
Bis(2-ethylhexyl) Phthalate		•	2001 200	2.7	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.9	1	04/13/05	05/05/05		
Benzo(b)fluoranthene	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND	U	10	3.6	1	04/13/05	05/05/05	KWG0505825	

Comments:

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Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: Lab Code:

TO63-SPN-SB03-4-5

K2502505-011

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	53	11-87	05/05/05	Acceptable	
Phenol-d6	64	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	51	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	60	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	77	23-113	05/05/05	Acceptable	
Terphenyl-d14	100	39-124	05/05/05	Acceptable	

+ Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

Page

SuperSet Reference:

RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/05/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5

Lab Code: K2502505-012
Extraction Method: EPA 3541

Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	50	37	5	04/13/05	05/05/05	KWG0505825	
Phenol	ND		150	15	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	50	18	5	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	50	26	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	250	90	5	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	50	22	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	24	5	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Nitrobenzene		Ū	50	15	5	04/13/05	05/05/05	KWG0505825	
Isophorone	ND		50	12	5	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	50	20	5	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND		250	41	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND		50	9.7	5	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND		50	9.7	5	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	100	90	5	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	100	66	5	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	250	120	5	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND		50	23	5	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	100	36	5	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	27	5	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND		100	21	5	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	50	21	5	04/13/05	05/05/05	KWG0505825	
Acenaphthylene		Ū	50	11	5	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND		100	20	5	04/13/05	05/05/05	KWG0505825	

Comments:

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Form 1A - Organic 1114 Page 1 of 3

SuperSet Reference: RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505 **Date Collected:** 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5

Lab Code: K2502505-012
Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg Basis: Dry

Level: Low

Analysis Nama	Result	0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name Acenaphthene	ND		50	7.5	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND ND		1000	270	5	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND		500	230	5	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND		50	9.7	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND		50	21	5	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND		50	26	5	04/13/05	05/05/05	KWG0505825	
Fluorene	ND		50	13	5	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND		50	15	5	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND		100	26	5	04/13/05	05/05/05	KWG0505825	
	ND		500	13	5	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND ND		50	17	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine 4-Bromophenyl Phenyl Ether	ND ND		50	11	5	04/13/05	05/05/05	KWG0505825	
	ND		50	16	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND ND		50	17	5	04/13/05	05/05/05	KWG0505825	
Atrazine	ND ND		500	64	5	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol				9.7	5	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND		50	9.7	<i>5</i>	04/13/05	05/05/05	KWG0505825	
Anthracene	ND		50	9.7	<i>5</i>	04/13/05	05/05/05	KWG0505825	
Carbazole	ND		50				05/05/05	KWG0505825	
Di-n-butyl Phthalate	24		50	20	5	04/13/05 04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND		50	17	5	04/13/05	05/05/05	KWG0505825	
Pyrene	ND		50	9.7	5				
Butyl Benzyl Phthalate	ND	U _	50	12	5	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND		500	28	5	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Chrysene	ND	U .	50	11	5	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	26	JD /000U	1000	13	5	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	50	9.0	5	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND	U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND		50	17	5	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND		50	18	5	04/13/05	05/05/05	KWG0505825	
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Comments:

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SuperSet Reference:

Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Date Collected: 04/05/2005

Service Request: K2502505

Project: Sample Matrix:

Soil

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-SPN-SB01-0-0.5

Units: ug/Kg Basis: Dry

Lab Code: K2502505-012

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	40	11-87	05/05/05	Acceptable
Phenol-d6	43	20-99	05/05/05	Acceptable
Nitrobenzene-d5	42	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	45	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	46	23-113	05/05/05	Acceptable
Terphenyl-d14	59	39-124	05/05/05	Acceptable

+ Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

RR47762

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Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/05/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-SPN-SB01-0-0.5 DUP

K2502505-013

Extraction Method: EPA 3541 **Analysis Method:** 8270C

Lab Code:

Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	50	36	5	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	150	14	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	50	18	5	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	50	13	5	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND		50	25	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	50	8.9	5	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	250	89	5	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	50	22	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	50	24	5	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	50	17	5	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	50	15	5	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	50	12	5	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	50	20	5	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	250	41	5	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND		50	9.6	5	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	50	11	5	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	99	89	5	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	ND	U	99	65	5	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	50	16	5	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND		50	8.9	5	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	250	120	5	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	50	14	5	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND		50	23	5	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND		99	36	5	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	50	27	5	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND		99	20	5	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND		50	14	5	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND		50	21	5	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND		50	11	5	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND		99	20	5	04/13/05	05/05/05	KWG0505825	
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Comments:

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Sample Matrix: Soil Service Request: K2502505 Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

TO63-SPN-SB01-0-0.5 DUP Sample Name:

Lab Code: K2502505-013 **Extraction Method:** EPA 3541 8270C **Analysis Method:**

Units: ug/Kg Basis: Dry Level: Low

Analyte Name	Result O	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND U	50	7.4	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	990	270	5	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	500	230	5	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	50	21	5	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	50	26	5	04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	50	13	5	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	50	15	5	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	99	25	5	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U 🖟	500	13	5	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	50	17	5	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	50	11	5	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND U	50	16	5	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	500	63	5	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U	50	11	5	04/13/05	05/05/05	KWG0505825	
Carbazole	ND U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	ND U	50	20	5	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND U	50	17	5	04/13/05	05/05/05	KWG0505825	
Pyrene	ND U	50	9.6	5	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U	50	12	5	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U U		28	5	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND U	50	11	5	04/13/05	05/05/05	KWG0505825	
Chrysene	ND U	50	11	5	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	27 JD 90	90 U 990	13	5	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	50	8.9	5	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	50	19	5	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND U	50	12	5	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	50	14	5	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	50	17	5	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	50	17	5	04/13/05	05/05/05	KWG0505825	···

Comments:

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Analytical Results

Client: Project: Battelle Memorial Institute

Sample Matrix: Soil

Novato Ballfields/G486063

Service Request: K2502505 Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-SPN-SB01-0-0.5 DUP

Lab Code:

K2502505-013

Units: ug/Kg Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	60	11-87	05/05/05	Acceptable	************
Phenol-d6	63	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	58	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	63	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	68	23-113	05/05/05	Acceptable	
Terphenyl-d14	81	39-124	05/05/05	Acceptable	

T	Anaiy	τe	Com	ments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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SuperSet Reference:

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Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-SPN-SB01-3-4

Lab Code:

K2502505-014

Extraction Method: Analysis Method:

EPA 3541 8270C Units: ug/Kg Basis: Dry

Level: Low

Analyte Name	Result	0	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND		10	6.2	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND		30	2.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND		10	3.1	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	4.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	16	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	3.7	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	2.8	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	7.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	16	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	21		20	12	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND '	U	50	19	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND 1	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND 1	U	20	6.1	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	4.6	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND 1	U	20	3.5	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND 1	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND		10	3.6	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND 1		10	1.8	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND 1	U	20	3.3	1	04/13/05	05/05/05	KWG0505825	

Comments:

(6/10/0)

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Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Soil Sample Matrix:

Service Request: K2502505 Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

TO63-SPN-SB01-3-4 Sample Name: Lab Code: K2502505-014

EPA 3541 **Extraction Method: Analysis Method:** 8270C

Units: ug/Kg Basis: Dry

Level: Low

Dilution Date Date Extraction **Factor** Analyzed Result O MRL MDL **Extracted** Lot Note **Analyte Name** 04/13/05 05/05/05 KWG0505825 ND U 10 1.3 1 Acenaphthene KWG0505825 ND U 200 46 1 04/13/05 05/05/05 2,4-Dinitrophenol 100 38 1 04/13/05 05/05/05 KWG0505825 ND U 4-Nitrophenol KWG0505825 05/05/05 Dibenzofuran ND U 10 1.7 1 04/13/05 KWG0505825 2.4-Dinitrotoluene ND U 10 3.6 1 04/13/05 05/05/05 KWG0505825 Diethyl Phthalate ND U 10 4.5 1 04/13/05 05/05/05 05/05/05 KWG0505825 ND U 10 2.2 1 04/13/05 Fluorene 05/05/05 KWG0505825 2.6 1 4-Chlorophenyl Phenyl Ether ND U 10 04/13/05 KWG0505825 ND U 20 4.3 1 04/13/05 05/05/05 4-Nitroaniline KWG0505825 ND U 100 2.2 1 04/13/05 05/05/05 2-Methyl-4,6-dinitrophenol KWG0505825 2.8 04/13/05 05/05/05 N-Nitrosodiphenvlamine ND U 10 1 4-Bromophenyl Phenyl Ether 05/05/05 KWG0505825 ND U 10 1.8 1 04/13/05 05/05/05 KWG0505825 Hexachlorobenzene ND U 10 2.7 1 04/13/05 05/05/05 KWG0505825 ND U 10 2.8 1 04/13/05 Atrazine 05/05/05 KWG0505825 ND U 100 11 1 04/13/05 Pentachlorophenol KWG0505825 ND U 10 1.7 1 04/13/05 05/05/05 Phenanthrene KWG0505825 1.8 1 04/13/05 05/05/05 ND U 10 Anthracene KWG0505825 05/05/05 ND U 10 1.7 1 04/13/05 Carbazole KWG0505825 05/05/05 IJ 10 3.3 1 04/13/05 Di-n-butyl Phthalate 29 05/05/05 KWG0505825 ND U 2.8 1 04/13/05 10 Fluoranthene KWG0505825 05/05/05 ND U 10 1.7 1 04/13/05 Pyrene KWG0505825 2.3 J 10 1.9 1 04/13/05 05/05/05 **Butyl Benzyl Phthalate** ND U UJ KWG0505825 4.7 1 04/13/05 05/05/05 3,3'-Dichlorobenzidine 100 05/05/05 KWG0505825 Benz(a)anthracene ND U 10 1.8 1 04/13/05 KWG0505825 05/05/05 ND U 10 1.8 1 04/13/05 Chrysene KWG0505825 05/05/05 200 2.2 1 04/13/05 360 Bis(2-ethylhexyl) Phthalate KWG0505825 05/05/05 04/13/05 1.6 1 Di-n-octyl Phthalate ND U 10 KWG0505825 3.2 1 04/13/05 05/05/05 ND U 10 Benzo(b)fluoranthene 04/13/05 05/05/05 KWG0505825 ND U 10 3.2 1 Benzo(k)fluoranthene 05/05/05 KWG0505825 04/13/05 2.1 1 ND U 10 Benzo(a)pyrene KWG0505825 ND U 10 2.4 1 04/13/05 05/05/05 Indeno(1,2,3-cd)pyrene 1 04/13/05 05/05/05 KWG0505825 10 2.8 ND U Dibenz(a,h)anthracene 04/13/05 05/05/05 KWG0505825 ND U 10 2.9 1

Comments:

Benzo(g,h,i)perylene

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Form 1A - Organic 1121

RR47762

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SuperSet Reference:

Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-SPN-SB01-3-4

Lab Code:

K2502505-014

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	48	11-87	05/05/05	Acceptable
Phenol-d6	52	20-99	05/05/05	Acceptable
Nitrobenzene-d5	39	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	46	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	68	23-113	05/05/05	Acceptable
Terphenyl-d14	86	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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SuperSet Reference: RR47762

Analytical Results

Battelle Memorial Institute Client: Novato Ballfields/G486063 Project:

Soil Sample Matrix:

Service Request: K2502505 Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

TO63-RSP-SB02-0-0.5 Sample Name:

K2502505-015 Lab Code:

Extraction Method: EPA 3541 8270C **Analysis Method:**

Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	10	7.1	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	U	30	2.8	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND	U	10	3.5	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	U	10	5.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND	U	50	18	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND	U	10	4.2	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND	U	10	4.7	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND	U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND	U	10	3.8	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND	U	50	8.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20	18	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	33		20	13	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND	U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND	U	50	22	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND	U	10	4.4	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	7.0	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND	U	10	5.3	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	4.0	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	10	2.7	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND	U	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND	U	10	2.1	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND	U	20	3.8	1	04/13/05	05/05/05	KWG0505825	

Comments:

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Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505 **Date Collected:** 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB02-0-0.5

Lab Code: K2502505-015

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg Basis: Dry

Level: Low

					Dilution	Date	Date	Extraction	
Analyte Name	Result (Q	MRL	MDL	Factor	Extracted	Analyzed	Lot	Note
Acenaphthene	ND I	J	10	1.5	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	J	200	53	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND U	J	100	44	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	J	10	1.9	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	J	10	4.1	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND U	J	10	5.1	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND I	J	10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND I	J	10	2.9	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U	J	20	5.0	1	04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U	LU L	100	2.5	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	J	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND U	J	10	3.1	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND U	J	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	J	100	13	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND U	J	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U		10	2.1	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND U	J	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	41	W	10	3.8	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND U	J	10	3.2	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND U	J	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U	J /	10	2.2	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U		100	5.4	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND U	J	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Chrysene	ND U	J	10	2.1	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	31 J	1	200	2.5	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U		10	1.8	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND U	J	10	3.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U		10	3.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene	ND U		10	2.4	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U		10	2.8	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U		10	3.2	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U		10	3.4	1	04/13/05	05/05/05	KWG0505825	
Delizo(g,ii,i)peryiene	110	-							

Comments:

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SuperSet Reference: RR47762

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Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project: Sample Matrix:

Soil

Service Request: K2502505 Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-RSP-SB02-0-0.5

Lab Code:

K2502505-015

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	58	11-87	05/05/05	Acceptable	
Phenol-d6	65	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	57	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	67	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	87	23-113	05/05/05	Acceptable	
Terphenyl-d14	103	39-124	05/05/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

3 of 3 Page

RR47762 SuperSet Reference:

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-RSP-SB02-5-6
 Units:
 ug/Kg

 Lab Code:
 K2502505-016
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

A. N. William	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	ND U	10	5.8	1	04/13/05	05/05/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND U	30	2.3	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether		10	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Chlorophenol	ND U ND U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND U ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether		50	1.5	1	04/13/05	05/05/05	KWG0505825	
Acetophenone	ND U		3.5	1	04/13/05	05/05/05	KWG0505825	
4-Methylphenol†	ND U	10 10	3.8	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodi-n-propylamine	ND U					05/05/05	KWG0505825	
Hexachloroethane	ND U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND U	10	1.9	1	04/13/05			
2-Nitrophenol	ND U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND U	50	6.5	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND U	20	15	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	24	20	11	1	04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
2-Methylnaphthalene	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND U	50	18	1	04/13/05	05/05/05	KWG0505825	
•	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
2,4,6-Trichlorophenol	ND U	10	3.6	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND U	20	5.7	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND U	10	4.3	1	04/13/05	05/05/05	KWG0505825	
2-Chloronaphthalene	ND U	20	3.2	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND U	10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate			3.3	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND U	10	3.3 1.7	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND U	10	3.1	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	ND U	20	3.1	1	UT/13/US	03,03,03		

Comments:

Form 1A - Organic

1126

SuperSet Reference: RR47762

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Page

Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project: Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-RSP-SB02-5-6

Lab Code:

K2502505-016

Extraction Method: Analysis Method:

EPA 3541 8270C

Units: ug/Kg Basis: Dry

Level: Low

	D14	^	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result			1.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthene	ND		10 200	43	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND		100	36	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol	ND						05/05/05	KWG0505825	
Dibenzofuran	ND	U	10	1.6	1	04/13/05 04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND	U	10	3.3	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	ND		10	4.2	1			KWG0505825	
Fluorene	ND	U	10	2.0	l	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND	U	10	2.4	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND	U	20	4.0	1	04/13/05	05/05/05		
2-Methyl-4,6-dinitrophenol	ND	U	UJ 100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND	U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobenzene	ND	U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Atrazine	ND	Ū	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND		100	10	1	04/13/05	05/05/05	KWG0505825	
	ND	U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Phenanthrene	ND ND	U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	36		V 10	3.1	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	ND	U	10	2.6	î	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND ND		10	1.6	1	04/13/05	05/05/05	KWG0505825	
Pyrene					1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND	U	10	1.8	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND	U	UJ 100	4.4 1.7	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND	***************************************	10					KWG0505825	
Chrysene	ND		10	1.7	1	04/13/05	05/05/05 05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	36	J	200U 200	2.0	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND	U	10	1.5	1	04/13/05			
Benzo(b)fluoranthene	ND	U	10	3.0	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
Benzo(k)fluoranthene	ND	U	10	3.0	1	04/13/05	05/05/05		
Benzo(a)pyrene	ND	U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND	U	10	2.3	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND		10	2.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND		10	2.8	1	04/13/05	05/05/05	KWG0505825	
Dormo(P'11'1)borlione									

Comments:

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Form 1A - Organic 1127

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SuperSet Reference:

RR47762

Analytical Results

Client:

Battelle Memorial Institute Novato Ballfields/G486063

Project:

Soil

Service Request: K2502505

Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

Sample Matrix:

TO63-RSP-SB02-5-6

Lab Code:

K2502505-016

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
2-Fluorophenol	58	11-87	05/05/05	Acceptable	
Phenol-d6	61	20-99	05/05/05	Acceptable	
Nitrobenzene-d5	55	10-99	05/05/05	Acceptable	
2-Fluorobiphenyl	64	10-104	05/05/05	Acceptable	
2,4,6-Tribromophenol	69	23-113	05/05/05	Acceptable	
Terphenyl-d14	101	39-124	05/05/05	Acceptable	

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic 1128

Page 3 of 3

RR47762 SuperSet Reference:

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-RSP-SB03-0-0.5

Lab Code: K2502505-017

Extraction Method: EPA 3541

Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Extraction Date Dilution Date Note Analyzed Lot Extracted MRL MDL **Factor** Result Q **Analyte Name** KWG0505825 04/13/05 05/05/05 5.6 10 ND U 1,2,4,5-Tetrachlorobenzene KWG0505825 05/05/05 04/13/05 2.2 1 30 ND U Phenol KWG0505825 04/13/05 05/05/05 1 2.8 10 Bis(2-chloroethyl) Ether ND U KWG0505825 05/05/05 04/13/05 10 2.0 1 ND U 2-Chlorophenol KWG0505825 05/05/05 04/13/05 10 3.9 1 ND U 2-Methylphenol KWG0505825 05/05/05 1.4 1 04/13/05 10 ND U Bis(2-chloroisopropyl) Ether KWG0505825 05/05/05 04/13/05 1 14 ND U 50 Acetophenone 05/05/05 KWG0505825 04/13/05 1 ND U 10 3.3 4-Methylphenol† KWG0505825 05/05/05 04/13/05 10 3.7 1 ND U N-Nitrosodi-n-propylamine 05/05/05 KWG0505825 1 04/13/05 2.5 10 ND U Hexachloroethane 05/05/05 KWG0505825 04/13/05 1 10 2.3 ND U Nitrobenzene KWG0505825 05/05/05 1.9 04/13/05 1 10 ND U Isophorone KWG0505825 04/13/05 05/05/05 3.0 1 10 ND U 2-Nitrophenol KWG0505825 04/13/05 05/05/05 50 6.2 1 ND U 2,4-Dimethylphenol KWG0505825 04/13/05 05/05/05 1 10 1.5 Bis(2-chloroethoxy)methane ND U KWG0505825 05/05/05 1 04/13/05 2.1 10 ND U 2.4-Dichlorophenol KWG0505825 05/05/05 04/13/05 1 ND U 10 1.5 Naphthalene KWG0505825 05/05/05 04/13/05 10 2.4 1 ND U 4-Chloroaniline KWG0505825 04/13/05 05/05/05 1 10 1.6 ND U Hexachlorobutadiene KWG0505825 05/05/05 04/13/05 14 1 20 ND U Caprolactam 05/05/05 KWG0505825 04/13/05 10 1 20 26 Benzaldehyde KWG0505825 05/05/05 2.4 1 04/13/05 10 ND U 4-Chloro-3-methylphenol KWG0505825 05/05/05 04/13/05 1.4 1 ND U 10 2-Methylnaphthalene KWG0505825 04/13/05 05/05/05 50 17 1 ND U Hexachlorocyclopentadiene KWG0505825 05/05/05 04/13/05 1 2.1 ND U 10 2.4.6-Trichlorophenol KWG0505825 05/05/05 04/13/05 1 3.4 ND U 10 2,4,5-Trichlorophenol KWG0505825 05/05/05 04/13/05 1 ND U 20 5.5 Biphenyl KWG0505825 04/13/05 05/05/05 1 4.1 10 ND U 2-Chloronaphthalene KWG0505825 05/05/05 1 04/13/05 3.1 20 ND U 2-Nitroaniline KWG0505825 04/13/05 05/05/05 1 2.1 ND U 10 Dimethyl Phthalate KWG0505825 05/05/05 3.2 1 04/13/05 10 ND U 2.6-Dinitrotoluene KWG0505825 05/05/05 1 04/13/05 1.6 10 ND U Acenaphthylene KWG0505825 04/13/05 05/05/05 1 3.0 ND U 20 3-Nitroaniline

Comments:

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Analytical Results

Client: Project: Battelle Memorial Institute Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505 Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-RSP-SB03-0-0.5

Lab Code:

K2502505-017

Extraction Method: Analysis Method:

EPA 3541 8270C

Units: ug/Kg Basis: Dry

Level: Low

-	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	ND U	10	1.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthene	ND U ND U	200	41	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U ND U	100	34	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol			1.5	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	10 10	3.2	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U	10	4.0	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate	6.7 J			1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	10	2.0 2.3	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	10 20	2.3 3.9	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U				04/13/05	05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U UJ	100	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	10	1.6	1			KWG0505825	
Hexachlorobenzene	ND U	10	2.4	1	04/13/05	05/05/05 05/05/05	KWG0505825	
Atrazine	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	100	9.6	1	04/13/05			
Phenanthrene	ND U	10	1.5	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
Anthracene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND U	10	1.5	1	04/13/05	05/05/05		
Di-n-butyl Phthalate	35 //	10	3.0	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
Fluoranthene	ND U	10	2.5	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND U	10	1.5	1	04/13/05	05/05/05		
	ND U	10	1.7	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U UJ	100	4.2	1	04/13/05	05/05/05	KWG0505825	
3,3'-Dichlorobenzidine	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND U	10	1.6	1	04/13/05	05/05/05	KWG0505825	
Chrysene	87 J	200	2.0	1	04/13/05	05/05/05	KWG0505825	
Bis(2-ethylhexyl) Phthalate	ND U	10	1.4	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND U	10	2.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	10	1.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene			2.2	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	10 10	2.2	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	10	2.6	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	10	4.0		V 1,			

Comments:

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Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-RSP-SB03-0-0.5

Lab Code:

K2502505-017

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	11-87	05/05/05	Acceptable
Phenol-d6	65	20-99	05/05/05	Acceptable
Nitrobenzene-d5	57	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	68	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	75	23-113	05/05/05	Acceptable
Terphenyl-d14	93	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic 1131

SuperSet Reference:

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RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

 Service Request:
 K2502505

 Date Collected:
 04/05/2005

 Date Received:
 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-RSP-SB03-5-6
 Units:
 ug/Kg

 Lab Code:
 K2502505-018
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

	D14	•	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	Result				1	04/13/05	05/05/05	KWG0505825	
1,2,4,5-Tetrachlorobenzene	ND		9.9	5.7 2.3	1	04/13/05	05/05/05	KWG0505825	
Phenol	ND	_	30	2.3	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethyl) Ether	ND		9.9				05/05/05	KWG0505825	
2-Chlorophenol	ND		9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
2-Methylphenol	ND	_	9.9	4.0	1	04/13/05 04/13/05	05/05/05	KWG0505825	
Bis(2-chloroisopropyl) Ether	ND		9.9	1.4	1				
Acetophenone	ND	U	50	14	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
4-Methylphenol†	ND	U	9.9	3.4	1	04/13/05	05/05/05		
N-Nitrosodi-n-propylamine	ND	U	9.9	3.8	1	04/13/05	05/05/05	KWG0505825	
Hexachloroethane	ND	U	9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Nitrobenzene	ND		9.9	2.4	1	04/13/05	05/05/05	KWG0505825	
Isophorone	ND		9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
2-Nitrophenol	ND		9.9	3.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dimethylphenol	ND		50	6.4	1	04/13/05	05/05/05	KWG0505825	
Bis(2-chloroethoxy)methane	ND		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
	ND		9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4-Dichlorophenol	ND ND		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Naphthalene	ND ND		9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
4-Chloroaniline			9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Hexachlorobutadiene	ND		20	1.7	1	04/13/05	05/05/05	KWG0505825	
Caprolactam	ND	U	20 20	11	1	04/13/05	05/05/05	KWG0505825	
Benzaldehyde	28					04/13/05	05/05/05	KWG0505825	
4-Chloro-3-methylphenol	ND		9.9	2.5	1		05/05/05	KWG0505825	
2-Methylnaphthalene	ND		9.9	1.4	1	04/13/05 04/13/05	05/05/05	KWG0505825	
Hexachlorocyclopentadiene	ND		50	18	1			KWG0505825	
2,4,6-Trichlorophenol	ND		9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
2,4,5-Trichlorophenol	ND		9.9	3.5	1	04/13/05	05/05/05	KWG0505825	
Biphenyl	ND	U	20	5.6	1	04/13/05	05/05/05		
2-Chloronaphthalene	ND	U	9.9	4.2	1	04/13/05	05/05/05	KWG0505825	
2-Nitroaniline	ND	U	20	3.2	1	04/13/05	05/05/05	KWG0505825	
Dimethyl Phthalate	ND	U	9.9	2.1	1	04/13/05	05/05/05	KWG0505825	
	ND	U	9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
2,6-Dinitrotoluene	ND		9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Acenaphthylene	ND ND		20	3.1	1	04/13/05	05/05/05	KWG0505825	
3-Nitroaniline	1112								/

Comments:

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Form 1A - Organic 1132

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SuperSet Reference:

RR47762

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063

Sample Matrix: Soil

Service Request: K2502505

Date Collected: 04/05/2005

Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

 Sample Name:
 TO63-RSP-SB03-5-6
 Units: ug/Kg

 Lab Code:
 K2502505-018
 Basis:
 Dry

 Extraction Method:
 EPA 3541
 Level:
 Low

Analysis Method: 8270C

	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Analyte Name	ND U	9.9	1.2	1	04/13/05	05/05/05	KWG0505825	
Acenaphthene	ND U	200	42	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrophenol	ND U	99	35	1	04/13/05	05/05/05	KWG0505825	
4-Nitrophenol		9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Dibenzofuran	ND U	9.9 9.9	3.3	1	04/13/05	05/05/05	KWG0505825	
2,4-Dinitrotoluene	ND U 5.3 J	9.9	3.3 4.1	1	04/13/05	05/05/05	KWG0505825	
Diethyl Phthalate			2.0	1	04/13/05	05/05/05	KWG0505825	
Fluorene	ND U	9.9 9.9	2.0	1	04/13/05	05/05/05	KWG0505825	
4-Chlorophenyl Phenyl Ether	ND U	9.9 20	4.0	1	04/13/05	05/05/05	KWG0505825	
4-Nitroaniline	ND U					05/05/05	KWG0505825	
2-Methyl-4,6-dinitrophenol	ND U US	99	2.0	1	04/13/05	05/05/05	KWG0505825	
N-Nitrosodiphenylamine	ND U	9.9	2.6	1	04/13/05 04/13/05	05/05/05	KWG0505825	
4-Bromophenyl Phenyl Ether	ND U	9.9	1.7	1				
Hexachlorobenzene	ND U	9.9	2.5	1	04/13/05	05/05/05	KWG0505825 KWG0505825	
Atrazine	ND U	9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Pentachlorophenol	ND U	99	9.9	1	04/13/05	05/05/05		
Phenanthrene	ND U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Anthracene	ND U	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Carbazole	ND U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Di-n-butyl Phthalate	28	9.9	3.1	1	04/13/05	05/05/05	KWG0505825	
Fluoranthene	ND U	9.9	2.6	1	04/13/05	05/05/05	KWG0505825	
Pyrene	ND U	9.9	1.6	1	04/13/05	05/05/05	KWG0505825	
Butyl Benzyl Phthalate	ND U	9.9	1.8	1	04/13/05	05/05/05	KWG0505825	
3.3'-Dichlorobenzidine	ND U UJ	99	4.3	1	04/13/05	05/05/05	KWG0505825	
Benz(a)anthracene	ND U	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
	ND U	9.9	1.7	1	04/13/05	05/05/05	KWG0505825	
Chrysene Bis(2-ethylhexyl) Phthalate	80 J 2004	200	2.0	1	04/13/05	05/05/05	KWG0505825	
	ND U	9.9	1.4	1	04/13/05	05/05/05	KWG0505825	
Di-n-octyl Phthalate	ND U	9.9	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(b)fluoranthene	ND U	9.9	3.0	1	04/13/05	05/05/05	KWG0505825	
Benzo(k)fluoranthene	ND U	9.9	1.9	1	04/13/05	05/05/05	KWG0505825	
Benzo(a)pyrene		9.9	2.3	1	04/13/05	05/05/05	KWG0505825	
Indeno(1,2,3-cd)pyrene	ND U	9.9 9.9	2.5	1	04/13/05	05/05/05	KWG0505825	
Dibenz(a,h)anthracene	ND U	9.9 9.9	2.7	1	04/13/05	05/05/05	KWG0505825	
Benzo(g,h,i)perylene	ND U	7.7	2.1	1	0.77.07.00			

Comments:

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SuperSet Reference: RR47762

Analytical Results

Client:

Battelle Memorial Institute

Project:

Novato Ballfields/G486063

Sample Matrix:

Soil

Service Request: K2502505

Date Collected: 04/05/2005 **Date Received:** 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:

TO63-RSP-SB03-5-6

Lab Code:

K2502505-018

Units: ug/Kg

Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	05/05/05	Acceptable
Phenol-d6	61	20-99	05/05/05	Acceptable
Nitrobenzene-d5	53	10-99	05/05/05	Acceptable
2-Fluorobiphenyl	59	10-104	05/05/05	Acceptable
2,4,6-Tribromophenol	72	23-113	05/05/05	Acceptable
Terphenyl-d14	99	39-124	05/05/05	Acceptable

† Analyte Comments

4-Methylphenol

This analyte cannot be separated from 3-Methylphenol.

Comments:

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Form 1A - Organic

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RR47762 SuperSet Reference:

VALIDATION COMPLETENESS WORKSHEET LDC #: 13575C2 Level III/IV SDG #: K2502505 Laboratory: Columbia Analytical Services

Reviewer 2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/5-6/05
II.	GC/MS Instrument performance check	4	/
111.	Initial calibration	an	10850 < 30/15. Y= 80CC 5
IV.	Continuing calibration	W.	700=20. 1ev=>=70
V.	Blanks	W .	/
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	.₽	
VIII.	Laboratory control samples	Φ	1C5 D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	\Rightarrow	
XI.	Target compound identification	A	Not reviewed for Level III validation.
XII.	Compound quantitation/CRQLs	\forall	Not reviewed for Level III validation.
XIII.	Tentatively identified compounds (TICs)	N	Not reviewed for Level III validation.
XIV.	System performance	A	Not reviewed for Level III validation.
XV.	Overall assessment of data	A	
XVI.	Field duplicates	W	D=12+13
XVII.	Field blanks	N	

Note: A = Acceptable

N = Not provided/applicable SW = See worksheet

ND = No compounds detected

R = Rinsate

D = Duplicate TB = Trip blank
EB = Equipment blank

FB = Field blank

Validated Samples: ** Indicates sample underwent Level IV validation

M	5015				
1 2	TO63-R3-SB04-0-0.5	113	TO63-SPN-SB03-4-5	21 KWG09058-5-5	31
24	TO63-R3-SB04-2-3**	123	TO63-SPN-SB01-0-0.5	22	32
35	TO63-R3-SB01-0-0.5	1 3 3¹	TO63-SPN-SB01-0-0.5 Dup	23	33
43	TO63-R3-SB01-4-5	143	TO63-SPN-SB01-3-4**	24	34
₅ 3	TO63-R3-SB02-0-0.5	153	TO63-RSP-SB02-0-0.5	25	35
63.	TO63-R3-SB03-0-0.5**	163	TO63-RSP-SB02-5-6**	26	36
7 3	TO63-R4-SB03-0-0.5	173	TO63-RSP-SB03-0-0.5	27	37
83	TO63-R4-SB03-3-4	183	TO63-RSP-SB03-5-6	28	38
93	TO63-R4-SB02-0-0.5	19	TO63-R4-SB03-0-0.5MS	29	39
103	TO63-R4-SB01-0-0.5**	20	TO63-R4-SB03-0-0.5MSD	30	40

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenal**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	W. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1.3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1.4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM, Bis(2-Chloroisopropyl)ether
F. 1.2-Dichlorobenzene	U. Hexachlorobutadisne**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	000. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
i. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	00. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	Щ.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	uuu.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	vvv.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	www.
				THE PROPERTY OF THE PROPERTY O

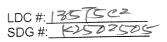
LDC #: /35/5C2 SDG #: K2502505

VALIDATION FINDINGS CHECKLIST

Page: / of A Reviewer: 4

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I, Technical holding times				
All technical holding times were met.	/			
Cooler temperature criteria was met.				
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	9			
Were all samples analyzed within the 12 hour clock criteria?	Ľ			
III. Initial calibration	T _		ı	
Did the laboratory perform a 5 point calibration prior to sample analysis?				
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	/			
Was a curve fit used for evaluation?	/			
Did the initial calibration meet the curve fit acceptance criteria of <u>></u> 0.990?	/		<u> </u>	
Were all percent relative standard deviations (%RSD) \leq 30% and relative response factors (RRF) \geq 0.05?				
IV. Continuing calibration	1		ı	
Was a continuing calibration standard analyzed at least once every 12 hours for each Instrument?				
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		_		
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?				
V. Blanks	ı			
Was a method blank associated with every sample in this SDG?	/		,	· · · · · · · · · · · · · · · · · · ·
Was a method blank analyzed for each matrix and concentration?				
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.				
VI. Surrogate spikes	T /			
Were all surrogate %R within QC limits?				
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?				,
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?				
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.				
Was a MS/MSD analyzed every 20 samples of each matrix?				
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?				
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?				



VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: 4
2nd Reviewer: 4

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?				
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control	1		Į.	
Were performance evaluation (PE) samples performed?				
Were the performance evaluation (PE) samples within the acceptance limits?				
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/			
Were retention times within ± 30 seconds from the associated calibration standard?	\mathbb{Z}_{-}			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?				
XII. Compound quantitation/CRQLs	T		Τ	
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	_			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?				
XIII. Tentatively identified compounds (TICs)	T		1	
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?				
Were relative intensities of the major ions within \pm 20% between the sample and the reference spectra?			/	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?				
XIV. System performance		a.		
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.				
XVI. Field duplicates			T	
Field duplicate pairs were identified in this SDG.	1			
Target compounds were detected in the field duplicates.				
XVII. Field blanks				
Field blanks were identified in this SDG.			1	
Target compounds were detected in the field blanks.				

VALIDATION FINDINGS WORKSHEET Initial Calibration

2nd Reviewer:_ Reviewer:

> METHOD: GC/MS BNA (EPA SW 846 Method 8270) SDG #: K2502505

LDC#: [35/767

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A". N/A N/A

Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?

Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?

Did the initial calibration meet the acceptance criteria?

Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF?

N N/A

			,	7	- 7	-									7					7								П
Qualifications	N 125 1.				757													- 3										
Associated Samples	1.3-20.B4				ζ																							
(Limit: ≥0.05))																											
(Limit: <30.0%)	23.6(515				S																							
Compound	4				HH																							
Standard ID	19/2				1 CH Tunner																							
# Date	9				5/5/05		And the state of t							THE REAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPE														
	Date Standard ID Compound (Limit: <30.0%) (Limit: >0.05) Associated Samples	Date Standard ID Compound (Limit: ≤30.0%) (Limit: ≥0.05) Associated Samples 5/2/05 Cf. 2 Cf. 3 Cf. 3	Date Standard ID Compound (Limit: ≤0.05) Associated Samples 5/2/05 CAT PP 2 3.6(≤ ±) . 3-20.84	Date Standard ID Compound (Limit: ≥0.05) Associated Samples 5/2/05 CAT PP 23.6(≤ ⊈) . 3-20.84 >	Date Standard ID Compound (Limit: ≥0.05) Associated Samples 5/2/05 CAT PP 2 3.6(≤ ⊈) . 3-20.84 >	Date Standard ID Compound (Limit: \$0.05) Associated Samples 5/b/05 1 CAZ PP 2 3.6 (\$1\$) 1.3-20.84 3 5/5/05 1 CAZ HH 26.8 (\$1\$) 2 3 3	Date Standard ID Compound (Limit: \(\frac{2}{30.0\%} \)) (Limit: \(\frac{2}{30.0\%} \)) Associated Samples 5\(\frac{2}{3} \) CAT \(\frac{2}{3} \) CAT CAT <td< th=""><th>Date Standard ID Compound (Limit: \gequiv.05) Associated Samples 5/2/05 I CAZ PP 2 3.6 (\sigma \frac{1}{2}) I. 3-20. BAK \rightarrow 5/5/05 I CAZ HH 26.8 (\sigma \sigma \sigma) \sigma \sigma</th><th>Date Standard ID Compound (Limit: ≥0.05) Associated Samples 5/5/05 I CAT PP 2 3.6 (< 5) I. 3-20.84 > 5/5/05 I CAT HH 26.8 (< 5) 2 O O</th><th>Date Standard ID Compound (Limit: ±30.0%) (Limit: ≥0.05) Associated Samples 5/5/05 ICAL PP 2 3.6 (≤/5) I. 3-20. B4k > 5/5/05 ICAL HH 26.8 (≤/5) 2</th><th>Date Standard ID Compound (Limit: ≥30.0%) (Limit: ≥0.05) Associated Samples 5/2/o5 CAT PP 2 3.6 (≤15) . 3-20.84 . 3-20.84 5/5/o5 CAT HH 26.8 (≤/5) . 3-20.84 . 3-20.84</th><th>Date Standard ID Compound (Limit: ≥0.0%) (Limit: ≥0.0%) Associated Samples 5/2/05 CA/2 PP 2 3.6 (≤ ⊈) . 3-20.84 5/5/05 CA/2 HH 22.8 (≤ ≲) 2 </th><th>Date Standard ID Compound (Limit: ≥0.05) Associated Samples</th><th>Date Standard ID Compound (Limit: \$30.0%) (Limit: \$0.05) Associated Samples \$\frac{5}{2}\sqrt{0}\sqrt{0}\$ (Call to the compound of the compou</th><th>Date Standard ID Compound (Limit: 530.0%) (Limit: 20.05) Associated Samples 5/5/05 1 CA72 PP 2 3.6 (< 1.3-20.8 Az 5/5/05 1 CA72 HH 24.8 (< </th><th>Date Standard ID Compound (Limit: ≤30.0%) (Limit: ≥0.05) Associated Samples 5/5/05 ICAZ PP 2 3.6 (≤1\$) I. 3-20.8 Ac > 5/5/05 ICAZ HH 26.8 (≤1\$) 2 ></th><th>Date Standard ID Compound (Limit: 20.0%) Associated Samples 5/5/05 1</th><th>Date Standard ID Compound (Limit: \$30.0%) (Limit: \$0.05) Associated Samples \$\frac{1}{2}\sigma^2 \circ \text{CA7} PP 2 3.6 (\$\leq \frac{1}{2}\) 1. 3-20.84 \text{\text{\$\circ}} \$\frac{5}{2}\sigma^2 \text{C} PP 2 3.6 (\$\leq \frac{1}{2}\) 1. 3-20.84 \text{\text{\$\circ}} \$\frac{5}{2}\sigma^2 \text{C} PH 26.8 (\$\leq \frac{5}{2}\) 2 \text{\text{\$\circ}}</th><th>Date Standard ID Compound (Limit: ≤30.0%) (Limit: ≥0.05) Associated Samples 5-\$\rightarrow\$\rightarrow\$ CATC PP 2.3.6 (≤15) 1.3-20.84 > 5-\$\rightarrow\$\rightarrow\$ CATC ATC ATC ATC ATC ATC 5-\$\rightarrow\$\rightarrow\$ CATC ATC ATC</th><th>Date Standard ID Compound (Limit ≥0.05) Associated Samples \$\frac{1}{2}\sqrt{10}\s</th><th>Date Standard ID Compound (Limit ≥0.05) Associated Samples \$\frac{1}{2}\rightarrow\infty\$ \$\frac{1}{2}\rightarrow\infty\$</th><th>Date Standard ID Compound (Limit ≤30.0%) (Limit ≥0.05) Associated Samples 5/2/05 ICAZ HH 23.6 (≤ ±4) I. 3-20.84 5/5/05 ICAZ HH 24.8 (≤ ±4) </th><th>Date Standard ID Compound (Limit: 20.0%) Associated Samples \$\frac{1}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$</th><th> Date Standard Compound (Limit \(\frac{1}{2}\) \(\frac{1}{2}\) </th><th> Date Standard Compound (Limit ±30.0%) (Limit ±3</th><th>Date Standard ID Compound (Limit ≥ 30.0%) Associated Samples \$\frac{1}{2}\rangle 05 \text{A} </th><th>Date Standard ID Conpound (Limit ≥ 30.0%) (Limit ≥ 0.04) Associated Samples 5/5/05 1/2/2<!--</th--><th> Date Standard ID Compound (Linit 2005) Associated Samples </th></th></td<>	Date Standard ID Compound (Limit: \gequiv.05) Associated Samples 5/2/05 I CAZ PP 2 3.6 (\sigma \frac{1}{2}) I. 3-20. BAK \rightarrow 5/5/05 I CAZ HH 26.8 (\sigma \sigma \sigma) \sigma \sigma	Date Standard ID Compound (Limit: ≥0.05) Associated Samples 5/5/05 I CAT PP 2 3.6 (< 5) I. 3-20.84 > 5/5/05 I CAT HH 26.8 (< 5) 2 O O	Date Standard ID Compound (Limit: ±30.0%) (Limit: ≥0.05) Associated Samples 5/5/05 ICAL PP 2 3.6 (≤/5) I. 3-20. B4k > 5/5/05 ICAL HH 26.8 (≤/5) 2	Date Standard ID Compound (Limit: ≥30.0%) (Limit: ≥0.05) Associated Samples 5/2/o5 CAT PP 2 3.6 (≤15) . 3-20.84 . 3-20.84 5/5/o5 CAT HH 26.8 (≤/5) . 3-20.84 . 3-20.84	Date Standard ID Compound (Limit: ≥0.0%) (Limit: ≥0.0%) Associated Samples 5/2/05 CA/2 PP 2 3.6 (≤ ⊈) . 3-20.84 5/5/05 CA/2 HH 22.8 (≤ ≲) 2	Date Standard ID Compound (Limit: ≥0.05) Associated Samples	Date Standard ID Compound (Limit: \$30.0%) (Limit: \$0.05) Associated Samples \$\frac{5}{2}\sqrt{0}\sqrt{0}\$ (Call to the compound of the compou	Date Standard ID Compound (Limit: 530.0%) (Limit: 20.05) Associated Samples 5/5/05 1 CA72 PP 2 3.6 (< 1.3-20.8 Az 5/5/05 1 CA72 HH 24.8 (<	Date Standard ID Compound (Limit: ≤30.0%) (Limit: ≥0.05) Associated Samples 5/5/05 ICAZ PP 2 3.6 (≤1\$) I. 3-20.8 Ac > 5/5/05 ICAZ HH 26.8 (≤1\$) 2 >	Date Standard ID Compound (Limit: 20.0%) Associated Samples 5/5/05 1	Date Standard ID Compound (Limit: \$30.0%) (Limit: \$0.05) Associated Samples \$\frac{1}{2}\sigma^2 \circ \text{CA7} PP 2 3.6 (\$\leq \frac{1}{2}\) 1. 3-20.84 \text{\text{\$\circ}} \$\frac{5}{2}\sigma^2 \text{C} PP 2 3.6 (\$\leq \frac{1}{2}\) 1. 3-20.84 \text{\text{\$\circ}} \$\frac{5}{2}\sigma^2 \text{C} PH 26.8 (\$\leq \frac{5}{2}\) 2 \text{\text{\$\circ}}	Date Standard ID Compound (Limit: ≤30.0%) (Limit: ≥0.05) Associated Samples 5-\$\rightarrow\$\rightarrow\$ CATC PP 2.3.6 (≤15) 1.3-20.84 > 5-\$\rightarrow\$\rightarrow\$ CATC ATC ATC ATC ATC ATC 5-\$\rightarrow\$\rightarrow\$ CATC ATC ATC	Date Standard ID Compound (Limit ≥0.05) Associated Samples \$\frac{1}{2}\sqrt{10}\s	Date Standard ID Compound (Limit ≥0.05) Associated Samples \$\frac{1}{2}\rightarrow\infty\$ \$\frac{1}{2}\rightarrow\infty\$	Date Standard ID Compound (Limit ≤30.0%) (Limit ≥0.05) Associated Samples 5/2/05 ICAZ HH 23.6 (≤ ±4) I. 3-20.84 5/5/05 ICAZ HH 24.8 (≤ ±4)	Date Standard ID Compound (Limit: 20.0%) Associated Samples \$\frac{1}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 1.3-20. \(\text{B-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ \$\frac{5}{2}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$ 2.3 \(\text{C-A}\rightarrow\infty\$	Date Standard Compound (Limit \(\frac{1}{2}\) \(\frac{1}{2}\)	Date Standard Compound (Limit ±30.0%) (Limit ±3	Date Standard ID Compound (Limit ≥ 30.0%) Associated Samples \$\frac{1}{2}\rangle 05 \text{A}	Date Standard ID Conpound (Limit ≥ 30.0%) (Limit ≥ 0.04) Associated Samples 5/5/05 1/2/2 </th <th> Date Standard ID Compound (Linit 2005) Associated Samples </th>	Date Standard ID Compound (Linit 2005) Associated Samples

SDG #: K2 02505 LDC #: [35[5@2

VALIDATION FINDINGS WORKSHEET Continuing Calibration

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

| Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

| Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?

| Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF?

Reviewer: 2nd Reviewer:

Page:

Qualifications	N 12/1		THE PARTY OF THE P		NW X		1/W/A		V	1777	The state of the s	AN LWY							THE RESIDENCE OF THE PARTY OF T
Associated Samples	1.3-20.BA				8		7.19-20. BA			/		m							
Finding RRF (Limit: >0.05)																			
Finding %D = (Limit: <25.0%)	60	\			27		24	3%	\mathcal{R}	22	27	23							
Compound	ABB			The stand of	BBB		×	PP	BBB	×	HH	7							
Standard ID	050x F017-18	1121			S1-110/5050	(lev)	<- /ax/250	/		0504 Feo/-2		0\$F-001-2							
# Date	50/10/19	/ /			5/5/05	/ /	5/3/05	/ /		50/4/05	/ /	2/10/12	/ /						
#																			

SDG #FORDSSOS LDC#: 18575C2

VALIDATION FINDINGS WORKSHEET Blanks

Page:__ 2nd Reviewer: Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Was a method blank analyzed for each matrix?

Was a method blank analyzed for each concentration preparation level? YN N/A ₹N N/A

Was a method blank associated with every sample? YN N/A

Was the blank contaminated? If yes, please see qualification below. AN NA

Blank extraction date: 4/3/5 SBlank analysis date: 5/3/65

BB 00 N B W 200 150× M 00 370 2/2 Sample Identification 100 N 207 2001 Ū a. Associated Samples: 250) 7 W N Noon 1 8 1 00 86/04 4 -Sel505/49/4 P Blank ID 1 5 00) Compound Conc. units: 加分区 Y

Associated Samples: Blank analysis date:_ Blank extraction date: Conc. units:

Compound	Blank ID				Sa	Sample Identification	tion			
	01 2-585050 MIN	01		(5)-21	12(5) 13(5) 14	7	15	91	21	81
\.\X	3.6	12/21	35 M 24 /2014	24 50W		nbe	29 U 41/U 38 W	36/1	35/U	28/1
72	9.8	18/200 1	Masz/11	26/0001	17/200 J 26/000 J 27/994 (360)		1/200 / Sec 1	31/2001/36/2001/87	(87)	Nac/as
				,				/		
									ı.	
				-				and the second s	A PROPERTY OF THE PROPERTY OF	de la company de

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were also qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 135/5C2 SDG #: 62522505

VALIDATION FINDINGS WORKSHEET Field Duplicates

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

	Y	Ν	N/A
1	Y	N	N/A

Were field duplicate pairs identified in this SDG?

Were target compounds identified in the field duplicate pairs?

	Concentration	1(48)	
Compound	12	13	RPD
XX	24	504	200
252	26	27	4
		/	/

	Concentration (
Compound		RPD

	Concentration ()	
Compound		RPD

	Concentration ()	
Compound			RPD
			kmontesetanis
·			
		подпровення	

SDG #: 4-350 2508 LDC #: 1357503

Initial Calibration Calculation Verification VALIDATION FINDINGS WORKSHEET

\of/ Page: Reviewer: 2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (A,)(C_e)/(A_e)(C_y) average RRF = sum of the RRFs/number of standards %RSD = 100 * (S/X)

 $A_{\bf k} = {\sf Area} \ of \ associated internal standard} \ C_{\bf k} = {\sf Concentration} \ of \ internal \ standard} \ X = {\sf Mean} \ of \ the \ {\sf RRFs}$

$$\begin{split} A_x &= Area \ of \ compound, \\ C_x &= Concentration \ of \ compound, \\ S &= Standard \ deviation \ of \ the \ RRFs, \end{split}$$

	MANUAL SALES S			Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
*	Standard ID	Calibration Date	Compound (Reference Internal Standard)	RRF (1) std)	RRF (\/=std)	Average RRF (initial)	Average RRF (initial)	%RsD	%RSD
_	1046	2///	Phenol (1st internal standard)	1.60	09.1	1.60	091	5:0	5.0
	(90)	100	Naphthalene (2nd internal standard)	€0.1	1.03	€0.1	1.03	4	4.3
			Fluorene (3rd internal standard)	15:1	15:1	. J &	1.28	4.5	6.4
			Pertections (4th internal standard)	1.26	92-1	1.26	1.26	5.9	6.1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.4	14.	14.	1.44	2.	0.7
			Benzo(a)pyrene (6th internal standard)	1.30	1.30	1.32	1,32	S S	88
Ŋ	134	12/2/05	Phenol (1st internal standard)	2.60	2.60	2,53	2.53	52	1.5
			Naphthalene (2nd internal standard)	60.1	1.09	1.07	1.00	30	2.9
	end distribution processed and significant control processed and significa	1	Fluorene (3rd internal standard)	1.18	21:1	181	1.21	2.0	2.0
			Pentachlorophenol (4th internal standard)	1.20	1.20	1.18	1.18	3.6	8,8
	овительного голодинала в вероинирации подолирающей под положение выполнение выполнение выполнение выполнение в		Bis(2-ethylhexy)phthalate (5th internal slandard)	7.3/	1.3/	1.34	1.34	36	3.6
			Benzo(a)pyrene (6th internal standard)	7.33	.33	1.30	1.30	2.0	9.00
ø			Phenol (1st internal standard)						
	еваниле филаруи (доминали в вергуру предоставления уструктивного городинали предоставать предоставать предоста		Nephthalene (2nd internal standard)						**************************************
	жений под коментеренция выполняющей под выполняющей под выполняющей под выполняющей под выполняющей под выполн	1	Fluorene (3rd internal standard)				- Christian Company of the Company o	AND THE PERSONS AND THE PERSON	
			Pentachlorophenol (4th internal standard)						
		1	Bis(2-ethylhexyl)phthalate (5th internal standard)					A STATE OF THE PROPERTY AND THE PROPERTY OF TH	
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 135/502 SDG #: [255255

VALIDATION FINDINGS WORKSHEET Continuing Calibration Results Verification

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF/ave. RRF RRF = $(A_{\rm a})(C_{\rm b})/(A_{\rm b})(C_{\rm s})$

Where: ave, RRF = initial calibration average RRF RF = continuing calibration RRF

A_x = Area of compound, C_x = Concentration of compound,

 $A_{\mathbf{k}} = \text{Area of associated internal standard}$ $C_{\mathbf{k}} = \text{Concentration of internal standard}$

					Reported	Recalculated	Reported	Recalculated
*	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	RRF (CC)	RRF (CC)	Q%	%D
	10078020	2/2/05	Phenol (1st internal standard)	1.60	1.68	1.68	15	3
		//	Naphthalene (2nd internal standard)	1.03	1.08	1.08	(3)	5
			Fluorene (3rd internal standard)	1.28	1.40	0t.1	8	
			Pentachibrophenot (4th internal standard)	1.26	1.31	1.31	4	Landy.
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1.44	1.44	カカ・/	6	0
			Benzo(a)pyrene (6th internal standard)	1.32	1.38	1.38	4	Color
2	10072500 1	50/5/5	Phenol (1st internal standard)	1.60	1.88	88.1	81	8/
		/ /	Naphthalene (2nd internal standard)	€0.1	601	60.1	Commission to transmission to the second	
			Fluorene (3rd internal standard)	8=1	1.38	1.38	D	
			Pentachiorophonol_(4th internal standard)	901	601	1.39	2	
			Bis(2-ethylhexyl)phthalate (5th internal standard)	1-44	1.47	6.47	(h)	COLOR DE LA COLOR
			Benzo(a)pyrene (6th internal standard)	7.33	1.38	1.38	A.	
Ø	100386001	50/8/5	Phenol (1st internal standard)	5.83	2.55	2.55		
	((((((((((((((((((((/ /	Naprthalene (2nd internal standard)	1.07	1.10	01.1	<u>N</u>	
			Flucrene (3rd internal standard)	1.21	1.17	211	9	
			Paniachiokophenol-(4th internal standard)	1.18	1.14	711	M	
	ме селения по да пределения выполня да подава пределения по повере денежнего выполня выполня выполня выполня в	and carbon speed characteristic control of the carbon speed carbon spe	Bis(2-ethylhexyl)phthalate (5th internal standard)	1.34	1.27	(2-1	prosecution.	A second
			Benzo(a)pyrene (6th internal standard)	1.30	1.30	1.30	0	

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results. LDC #: 135 5c2 SDG #: 62505

VALIDATION FINDINGS WORKSHEET Surrogate Results Verification

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Reviewer:	9-
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	7

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found SS = Surrogate Spiked

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	2500	1145	46	46	0
2-Fluorobiphenyl	,	1183	47	47	1
Terphenyl-d14		1634	65	65	
Phenol-d5	3750	2043	54	54	
2-Fluorophenol	/	1778	AT	47	
2,4,6-Tribromophenol		2141	57	57	V
2-Chlorophenol-d4			,		
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:_____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

SDG #: E>\$05505 LDC #: 185/502

Matrix Spike/Matrix Spike Duplicates Results Verification VALIDATION FINDINGS WORKSHEET

2nd Reviewer: Page: Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC · SC)/SA

SC = Sample concentation

Where: SSC = Spiked sample concentration SA = Spike added

MSD = Matrix spike duplicate percent recovery

RPD = 1 MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery

MS/MSD samples: 820

	ds	Spike	Sample	Spiked Sample)ample	Matrix Spike	Spike	Matrix Spike Duplicate	Duplicate	MS/MSD	30
Compound	Add	Added (Section 1)	Concentration (/)	Concentration	tration >	Percent Recovery	ecovery	Percent Recovery	ecovery	RPD	
	MS	MSD		MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	249	249	NB	25)	164	09	90	99	99	6	6
2-Chlorophenol	<i>></i>	~	<i>/</i> *	(33	152	24	75	- V	0	<u> </u>	3
1,4-Dichlorobenzene.											O PROPERTY AND
N-Nitroso-di-n-propylamine	240	670	4N	140	172	95	56	69	69	1	/ 25
1,5,4-Trichtorobenzene									,		
4-Chloro-3-methylphenol	249	670	NB	162	47	59	59	ES	59		0
Acenaphthene			,	164	18	99	99	63	63	Britanist	<i>S</i>
4-Nitrophenol	-			212	189	88	88	92	22	14	7
2,4-Dinitrotoluene			,	(بر/	164	63	63	99	20	The state of the s	1
Pentachlorophenol			À	180	167	13	22	19	4	100	X
Pyrene		<u>\</u>	19.4	184	172	70	70	-59	65	Long	
										Name of the last o	Management of the State of the

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Sa5=0,501:# 50S LDC #: 1387562

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification VALIDATION FINDINGS WORKSHEET

Reviewer:

₽ 2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA

SSC = Spike concentration SA = Spike added Where:

RPD = 1LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: <N + 150 58-5-3

Recalculated 0 N N CS/CSD RPD Reported Appendix. 0 Recalc. D 0 8 2 Percent Recovery CSD Reported D 100 9 T W. Recalc. 19 1 2 8 80 Percent Recovery V O S Reported 8 S S N 70 200 0 Ø CSD n R 205 209 100 1881 40 200 ロト 88 Concentration CS (68) 12/2 女の E 00 40 10 E 0 Both 225 200 CCSD Added 200 202 200 rcs N-Nitroso-di-n-propylamine 4-Chloro-3-methylphenol Compound 1,24-Trichlorobenzene 4.4-Dichlorobenzene **Pentachlorophenol** 2,4-Dinitrotoluene 2-Chlorophenol Acenaphthene 4-Nitrophenol Pyrene

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results. LDC #:<u>13575C3</u> SDG #:<u>6250250</u>5

VALIDATION FINDINGS WORKSHEET Sample Calculation Verification

Page:_	
Reviewer:	9
2nd reviewer:	V
_	7

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

N(A)	N/A
Y N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Conc	entratic	on = $\frac{(A_{,})(I_{,})(V_{,})(DF)(2.0)}{(A_{,b})(RRF)(V_{,b})(V_{,})(V_{,})(S)}$	Example:
A_x	***	Area of the characteristic ion (EICP) for the compound to be measured	Sample I.D. 2
A_{is}	=	Area of the characteristic ion (EICP) for the specific Internal standard	1000 1000 1000
i,	==	Amount of internal standard added in nanograms (ng)	Conc. = (10016)(1000)(2 (90646)(150)(33.94)(2.53
V _o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).	
V_{i}	=	Volume of extract injected in microliters (ul)	= 4.07 M8/eg
V,	=	Volume of the concentrated extract in microliters (ul)	
Df	=	Dilution Factor.	
%S	=	Percent solids, applicable to soil and solid matrices	

= Factor of 2 to accou	nt for GPC cleanup				
Sample ID	Compound		Reported Concentration ()	Calculated Concentration ()	Qualification
			West and the second		
		de en la constitución de la cons			
	Sample ID	= Factor of 2 to account for GPC cleanup	= Factor of 2 to account for GPC cleanup	= Factor of 2 to account for GPC cleanup Reported Concentration	Sample ID Compound Reported Concentration () Concentration () Concentration () Concentration () Concentration ()